

RESEARCHERS' SEMINAR-1984

COLLECTION OF PAPERS

299

RESEARCHERS' DAY CELEBRATION
(Sponsored by ERIC, NCERT)

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

SRI AUROBINDO MARG, NEW DELHI - 110016

E D I T O R S

A . D . TEWARI

K . B . RATH

PATRON

Prof. C.H.K. Misra,
Member-Secretary,
Educational Research & Innovations
Committee, N.C.E.R.T.,
New Delhi-110016

CONVENER

NIE RESEARCH FELLOWS ASSOCIATION
N.C.E.R.T., NEW DELHI

FINANCED BY

EDUCATIONAL RESEARCH AND INNOVATIONS
COMMITTEE, N.C.E.R.T.,
NEW DELHI-110 016

ORGANISING COMMITTEE

A.D. TARI

K.B. RATH

N. SINGH

S.R.P. CHOWDHARY

D.C. JAIN

V. RAMARAO

PRABHAKAR SINGH

PARTICIPATION

- Centre for Policy Research
- Jamia Millia Islamia
- Jawaharlal Nehru University
- National Council of Educational Research and Training
- National Institute of Health and Family Welfare
- National Institute of Public Cooperation and Child Development
- Rajender Prasad Hospital



SIR. C. V. RAMAN.

Copyright: Mrs. K. R. Raman
SIR C. V. RAMAN

B I O G R A P H Y *

The great Indian Researcher, Sir Chandrasekhar Venkata Raman was born on November 7, 1888, at Trichinopoly, Madras, where his father taught physics in a church college. A few years later, the family moved to Vizagapatam, when the father was appointed as lecturer in the local college. Raman received his early education there until he entered Presidency College in Madras in 1902. He graduated with a bachelor's degree in 1904, standing first in his class and winning the Gold Medal in Physics. By the time he completed his master's degree in physics in 1907, he had already done original work in optics and acoustics, but since at that time there was little scope for scientific research in India, he took the competitive examination for a post in the Finance Department of the government of India. Again he won first place and as a result was appointed assistant accountant general in the central government office in Calcutta.

During the next 10 years, while working in the Finance Department, Raman continued his scientific researches on his own in the laboratory of the Indian Association for the cultivation of science. The importance of his work was recognised by his appointment in 1917, to the first endowed chair in Physics at Calcutta University. He kept this post until 1933.

Raman's years at Calcutta University were marked by great creativity and intellectual excitement, although by western standards his laboratory facilities were meager. Many honours came to him as the significance of his work was acknowledged in India and abroad, as in 1929, when he was invited to do research at the California Institute of Technology. The most tangible evidence of this recognition came in 1927, when the British Government conferred a Knighthood on him, and in 1930, when he was awarded the Nobel Prize.

Raman Effect:

Raman's early scientific interests were centered on phenomena associated with the scattering of light, The most familiar example of which is the effect created when light enters a darkened room through a small hole. The beam of light is then clearly seen because the light is scattered by the particles of dust in the air. That scattered light contained wavelengths in different proportions from the wavelengths of the main beam of light had been known since Tyadall's experiments in 1868, but a fully satisfactory analysis of the phenomenon had not been made.

It was this and related problems that Raman was studying at Calcutta when he discovered that when an intense light was passed through a liquid and was scattered by the molecules in the liquid, the spectrum of the scattered light

showed lines not in the spectrum of the incident light. This discovery was the Raman Effect, which had such great influence on later work on molecular structure and Radiation that Raman was recognized as one of the truly seminal minds on the history of modern physics.

After Raman retired from Calcutta University, he became director of the Indian Institute of Science in Bangalore, where he remained until 1948, when he became Head of the new Raman Research Institute in the same city. Here he continued to guide research and to inspire his students and coworkers. The spoke of his intense enthusiasm and volcanic energy and of his great generosity in acknowledging the contribution of other. According to one former student, he would "give away whole time of research which lesser men would be tempted to keep for themselves.

Raman's attractiveness as a person was rooted in his aesthetic approach to science, with his choice of subjects for investigation reflecting his love of music, color, harmony and pattern. He told how his great discovery of the Raman effect was stimulated during a voyage to Europe in 1921, when he saw for the first time "the wonderful blue opalescence of the mediterranean sea" and began to think that the phenomenon was due to the scattering of sunlight by the molecules of water.

Raman influenced Indian scientific development through the Indian Journal of Physics, which he helped found and

which he edited. He was also a gifted popularizer of modern scientific ideas, and he lectured widely to lay audiences. He died in Bangalore on November 21, 1970.

Further Reading

C.V. Raman is listed in the Asia Study Guide (11, A,B,C). Other Indian Scientists were Homi Jehangir Bhabha and Har Gobind Kherana.

Raman gets forth his own views on Modern Science in an attractive way in his The New Physics (1951). Some biographical details and a brief account of his scientific work are in Midst. dev. Heathcote, Nobel Prize winner in Physics, 1901-1950(1953). A more technical discussion is S. Bhagavantam, 'Scattering of Light and the Raman Effect (1940). A consideration of Raman's many-sided contribution to science is made by his students and colleagues in Proceedings of the Indian Academy of Sciences, Vol. 28(1949).

* Raman by Ainslie T. Embree in The McGraw-Hill Encyclopedia of World Biography, McGraw-Hill Book Co. New York.

Courtesy : Mr. B.S. Negi, CES, IIT, New Delhi.

PREFACE

It is our fifth successive effort of celebrating Researchers' Day to pay tributes to great Indian scientists from all disciplines. The progress and success^{of our efforts} can be observed by the statement that, only one paper was read in the Researchers' Seminar of 1980, five papers were presented in the Researchers' Seminar of 1981. Collections of nineteen and twenty-four papers were brought out in the Researchers' Seminar of 1982 and 1983 respectively which were presented on that occasion.

NIE Research Fellows Association, NCERT had invited various organisations in Delhi to participate in the Researchers' Seminar of 1984. As a result, six organisations other than NCERT consented for participation. Twenty-four papers have been selected for presentation this year. We acknowledge gratefully the contribution of the participants and respective organisation.

These papers have been compiled under the title "RESEARCHERS' SEMINAR - 1984: Collection of Papers". This could become possible only on receipt of financial and secretarial assistance from NCERT. We are grateful to our Director, Prof. P.L. Malhotra; Joint Director, Dr. A.K. Jalaaluddin; Dean(Research), Prof. Atmanand Sharma, Dean (Academic), Prof. B.S. Parekh and Member-Secretary(ERIC), Prof. C.H.K. Misra for the generous help, encouragement and

guidance offered to us time to time whenever sought.

We are highly indebted to Prof. A.K. Jalaluddin, who has kindly consented to inaugurate the Seminar despite prior engagements. Thanks are also due to the Chair persons of various sessions who agreed to our request to conduct the sessions.

The organising committee of the Seminar has been working actively and unitedly throughout the period, also deserve thanks.

The secretarial assistance was also made available all the time for the Seminar work. For which thanks are due to office staff of ERIC, NCERT.

Last but not the least we are thankful to those who directly or indirectly inspired and actively helped in the organisations of this Seminar.

We accept this fact that papers included in this Volume may not be of high quality but still it reflects the solemn and dedicated efforts of beginner researchers to learn 'something'. Our effort is now in your hands. You are the best judge to evaluate. We will gratefully acknowledge bringing in your suggestions for improvement in ourselves.

Convenor
Researchers Seminar
NIE Research Fellows
Associates, New Delhi.

C O N T E N T S

<u>S.No.</u>	<u>Paper</u>	<u>Page</u>
1.	A Study of Career Choices of School and College Student in Relation to Their Family Income and Family Occupation - A.D. Tewari & S.S. Vinayak	1.1-1.15
2.	Interaction between Structures of Concept Learning & Personality Types of Learners - Devender Kaur	2.1-2.10
3.	Job Satisfaction and Neuroticism - Jai Dev Bakshi & Monika Sharma	3.1-3.8
4.	Relationship of Intellectual Development with Achievement of XI Grade Science Students - Santosh Kumar	4.1-4.14
5.	Personality Pattern of Under and Over Achievers - Surya Mani Mishra	5.1-5.10
6.	Intelligence and Reaction Time: Comparison between Government and Convent High School students - Surender K. Sharma	6.1-6.14
7.	Relationship of Locus of Central to State - Trait Anxiety and Self-Esteem Among Ninth Grade Children - Trilochal Jena	7.1-7.10
8.	A Model for Estimating Pupil Enrolment and Teacher Demand - A.D. Tewari	8.1- 8.8
9.	A Comparative Study of Tribal Learners of Project and Non-project Schools with reference to Impact of Need and Relevance Based Curriculum on Enrolment, Retention and Attainment of Language Competencies. A.K. Samal	9.1-9.11
10.	Distance Teaching - Concept, Objectives, Characteristics and Development - C.C. Upadhyay	10.1-10.5
11.	Education: A Media of Transmitting Values - N. Singh	11.1-11.10
12.	Model Based Teaching as a Strategy for Improved Teaching Effectiveness - R. Rath	12.1-12.11

13. Promoting Researches in Integrated Education for the Disabled - K.B. Rath 13.1-13.6
14. Factorial Structure of Teaching Behaviour - Prabhakar Singh. 14.1-14.12
15. Problems of Dropout Among the Tribal Children in Primary Schools - An Exploratory Study - P.K. Tripathi 15.1-15.16
16. Student Teachers and Teaching Profession - R.D. Sharma 16.1-16.7
17. Education and World Peace - Sakti P. Mishra 17.1-17.12
18. Non-formal Education: Special Reference to Orissa - S. Mahapatra 18.1-18.12
19. Need for Formal Education for Tribal Children - V. Rama Rao 19.1-19.12
20. Rural and Urban Dichotomy: Some Comments and Thoughts on Classification - D.R. Siwal 20.1-20.8
21. Secular Attitude of Primary Grade Children Rural and Urban Comparison - G.C. Upadhyay 21.1-21.7
22. The Problem of Dowry in Modern India - Govind C. Rath 22.1-22.13
23. The Youth and Mass Media - S.S. Vinayak and A.D. Tewari * 23.1-23.7
24. A Study of the Relationship Between Self Concept and Scholastic Achievement of VII Grade Students - S.R.P. Chaudhari 24.1-24.9

P S Y C H O L O G Y

A N D

E D U C A T I O N

1.1

A STUDY OF CHOICES OF SCHOOL AND COLLEGE STUDENTS IN RELATION TO THEIR FAMILY INCOME AND FAMILY OCCUPATION

A.D. Tewari and
S.S. Vinayak
DTE, NCERT
NEW DELHI.

In this study an attempt has been made to explore the effect of family income and family occupation in the career choices of students both from schools and colleges. The sample of the study includes 100 school and 100 college students selected from four schools and four colleges in Delhi. Students were asked to respond against questions on their career choice, family-income and family occupation in an open ended questionnaire. Responses given by students were categorized according to eight divisions of National Classification of Occupations (NCO) plus one more for defence service and five family-income categories. Results show that in a specific income group or family occupation category, the proportion of school students choosing a career differs significantly than that of the proportion of college students in some cases while it does not differ in most of the cases. Further, relationship between family occupation and career choice has shown low, but statistically significant (at 05 level) value in case of school students and negligible and statistically insignificant in case of college students.

INTRODUCTION:

It is equally acclaimed by researchers, philosophers as well as laymen that in the social systems we are having in our country, family background factors are significant determinants of the choice of a career by our young children.

In India, students are totally dependent upon their family in respect to the cost of education and other facilities in this regard. Elder family members cater their dependents needs and requirements to the best of their resources. And as a result of which the decisions regarding educational and career choices are largely affected by the family factors.

Hopppock (1967) in his book "Occupational Information" has mentioned that theorist like Clark(1931), Carp(1949); Hollingshead (1949), Mitter and Form (1951), Caplow(1954) and Warner and Abogglan (1955) etc. have given convincing evidence that economical and sociological factors do limit the range of occupations to which a person has careers, do direct his attention to some occupations and away from others, and do affect the occupational distribution of the population.

A number of researchers have been conducted to identify the family influence and educational decision and career choices of students. To restrict this study only to career choice, few studies to mention are:- Dyer (1958),

contd..

Stieinke, et.al.(1961), Crites (1962), Knapp and Bedford (1967), Werts (1968), Babelon(1972) and Shoffner and Klemmer (1973). They have made efforts to identify parental influence to career choice of students. Parental occupation and career choice of students have been investigated by Sears (1915), Krippner (1963), Lee and King (1964). Hanson (1965), Mawbesian et.al.(1966) and Vignod (1972). Studies on identifying the relationship and effect of social status or social variables on career choices have also been conducted by a number of researches like Anderson (1932), Hall (1950), Galler (1951), Emney (1956), Sewell et.al.(1957), Keiss(1961), Lispet (1966), Calvin (1967) and Tseng (1971).

In Indian setting not much evidence have been available to reach at some valid conclusion in this matter. So, this study was therefore aimed at to investigate the effect of family income and family occupation on career choice of students.

OBJECTIVES:

1. to study career choices of students in relation to their family income,
2. to study career choices of students in relation to their family occupation, and
3. to identify the relationship between career choices of students and their family occupation.

contd...

HYPOTHESES:

1. family income does not affect significantly to the career choices of school and college students.
2. family occupation does not affect significantly to the career choices of school and college students.
3. career choices of students has no significant relationship with family occupation.

DEFINITION OF TERMS USED:

1. Career Choices:

Various terms have been used synonymously to career choice in Occupational Psychology. They are having difference only in the academic interest. In this study career choices is referred to the occupation of profession or vocation or job the student likes for himself to join after completion of his education.

2. Family Income:

In this study family income is given by the monthly income of the family of the student. The income have been categorised into five groups there are:

contd.

1. Income group - I Upto Rs. 500 pm.
2. income group -II Rs. 500 to 1000 pm.
3. income group -III Rs. 1000 to 1500 pm
4. income group -IV Rs. 1500 to 2000 pm
5. income group -V Rs. 200 and above pm

3. Family Occupation:

It is referred to the occupation of the family head. Father or elder brother has been taken as the family head

4. National Classification of Occupations (NCO)

It is a revised edition of the International Standard Classification of Occupation (ISCO). In the NCO the grouping of occupation has been done on the fundamental criterion of 'type of work performed'. According to NCO(1968) there are eight divisions with ninety five groups, four hundred and sixty two families and in all two thousand four hundred eighty four occupations. It is beyond the scope of this study to give a detailed account of all groups, families and occupations. Our main concern is with the divisions only which are given below in the Table II.

contd..

TABLE IIDIVISIONS OF OCCUPATIONS IN NGO *

S.No.	Division	Description
1.	0-1	Professional, Technical and Related Workers.
2.	2	Administrative, Executive and Management workers.
3.	3	Clerical and Related Workers.
4.	4	Sales Workers.
5.	5	Service Workers.
6.	6	Farmers, Fishermen, Hunters, Loggers and Related Workers.
7.	7 - 8 - 9	Production and Related Workers, Transport equipment Operators and Labourers.
8.	10	Workers not classified by occupations

* Besides these eight divisions one more division.. was formed to cover defence services, as it is to be mentioned that NGO does not include careers in defence services in the Occupational classification.

contd...

This study was conducted on a sample of 200 students 100 each from Delhi Government Boys Higher Secondary Schools studying in X & XII classes and 100 from colleges studying in undergraduate classes in Delhi. Students are male and unmarried. Four schools and four colleges were selected randomly for this purpose.

Procedure:

Twenty five students from each of the four schools and four colleges selected randomly were administered in groups an information blank. This information blank seeks information regarding background variables, family income, family occupation and career choices of students. Career choices of students were classified accordingly to NCO divisions for each family income group. Family Occupation were also classified accordingly to NCO classification.

Data thus collected were analysed using percentage analysis, and Spearman's Coefficient of correlation.

contd...

Analysis and Interpretation: In Table-2 the family income, career choice of school and college students and critical ratio along with level of significance of difference between proportions have been given.

It can be seen from Table. 2 that out of 45 C.R. values only 24 C.R. values could be calculated of which only two C.R. values were found to be significant at 01. level and only two at 05 level. None of the C.R. values for income group 2, 4 and 5 were found significant at either level.

Further it can be seen that none of the school and college students of either family income group have been shown their choices for the jobs in the NCO categories 5,6 and 7-8-9. Jobs in these categories more manual labour is desired.

In Table 3. family occupations career choices of school and college students and critical ratios along with level of significance of the difference between proportion have been given.

contd...

Table 2 Critical Ratio for Significance of Difference Between Proportions

Occupation (NCO)	Groups	Family Income (per month)					Total
		I	II	III	IV	V	
0-1	School College	3 16	16 117	5 135	6 204*	3 154	33 225*
2	School College	1 -3.07** 4	3 -1.51 6	4	8	11	4 -3.33** 23
3	School College	1 8	0.36 5	1 -0.53 2	2 0.45 2	1	12 0.45 10
4	School College	4 6	-0.49 6	3	3 1.57 1	1	16 1.74 8
5	School College						
6	School College						
7-8-9	School College						
X	School College	6 0.05 2	3 -0.78 4	2 -0.80 4			11 0.23 10
D	School College	8 0.53 2	8 0.23 4	6 0.13 6	2 3	2 0.96 5	24 0.69 20
Total	School College	23 8	44 33	17 18	11 17	5 24	100 100

Significant at .01 level

Significant at .05 level

* Significant at .01 level

** Significant at .05 level

Table 3
Family Occupation, Career Choice and Critical Ratio for Significance of Difference Between Proportions.

Family Occupation (NCO)	Students	Career Choices (NCO)									
		0-1	2	3	4	5	6	7-8-9	X	D	Total
0-1	School College	10 115 3	2	1 -135 3	2 -078 2				1 -008 1	3	17 0.61 14
2	School College	4 082 1		4						1 -015 1	5 -083 8
3	School College	3 024 2		3 032 1				2		1 -015 1	9 1.05 7
4	School College	3 -219 6		4 134 1	4					1 -078 2	12 -170 21
5	School College	10 258 5	2 054 12	2 -167 5	5 -146 5			6 063 2		14 -027 12	39 -029 41
6	School College			2	1					1 -015 1	2 -042 3
7-8-9	School College	1			2					1	4 1.25 1
X	School College	1 -326 1	2 -326 1		1			2 053 1		2	8 1.47 3
D	School College	1 -036 1		2							4 0.00 4
Total	School College	33 -036 19	4	12	16	8			11	24	100

* Significant at 0.01 level

A perusal of the Table-3 reveals that out of 90 C.R. values only 31 could be calculated of which only one was found to be significant at .01 level while only two were at significant 05 level. None of the school and college students have shown that career choices for jobs categorised in the NCO categories 9,6 and 7 - 8-9. In the NCO category 0-1, 2,3,6, 7-8-9 and Dr .C.h. Value was found significant at 05 level even.

Spearman Correlation between family occupation and career choice of school students, college students and for the total sample were also computed and found to be .32, .16 and .25 respectively. These values are negligible to low statistically insignificant at over 05 level(except for school students which is significant at 05 level.)

Results:

In most of the cases, both for family income and family occupation career choices of school and college students, the C.R. Values were not significant. But still some values were significant at 01 and 05 levels. This leads to reject hypotheses I & II partially.

Further, the correlation between family occupation

contd....

and career choice of school students was low positive and significant at 05 level; negligible positive and insignificant for college students provides reason to partial rejection of the third hypothesis.

Discussion:

Results of this study reveal that very few C.R. values were found significant either at 01 or 05 level when career choice of school and college students in a specific family income group or family occupation category were compared. This may be indicative of findings but larger representation can give more accurate results. Still it can be seen that in majority of groups or categories career choices of school and college students do not differ.

Relationship between ^{family} occupation and career choice of students reveals that for school students it is significant at 05 level which insignificant in case of college students it is not significant. The significant value is low and positive. The reason may be less occupational maturity among school students than college students.

REFERENCES:

- Chadda, S.S. : Socio Psychological Correlates of Vocational Aspiration, Agra: National Psychological Corporation, 1982
- Galler, E.H. ; Influence of Social Class on Children's Choice of Occupation. Elementary School Journal. 1951, 51, 439-445.
- Garrelt, H.E. : Statistics in Psychology and Education Bombay: Vakils, Feffer and Simons (P) Ltd. 1966
- Henson, J. : Ninth Grade Girls' Vocational Choices and Their Parents' Occupational Level. The Vocational Guidance Quarterly, 1965, 13, 261-264
- Hoppock, R. : Occupational Information, New York: Mac Graw Hill Book Co., 1967
- Krippner, S. : Junior High School Students' Vocational Preference and Their Parents' Occupational Levels. Personnel & Guidance Journal, 1963, 41, 590-595.
- Lee, B.L. & King, P. : Vocational Choice of Ninth Grade Girls and Their Parents' Occupational Levels. Vocational Guidance Quarterly. 1964, 12, 163-167
- Mowsesian, R.etal: Superior Students Occupational Preference and Their Fathers' Occupations. Personnel and Guidance Journal, 1966, 45, 238-242.
- Sears, J.B. : Occupations of Fathers and Occupational Choice of Sons. School and Society, 1915, 1, 750-756.
- Super, D.E. : Appraising Vocational Fitness by Means of Psychological Test, New York: Harper & Row Brothers, 1962.
- Vingrod, Z. : The Relationship between Occupational Choice and Parental Occupations.

contd.

1.14

Journal of Educational Research, 1972
18(4), 287-294.

Werts, C.E.

Paternal Influence on Career Choice.
Journal of Counselling Psychology,
1968, 15, 48-52.

INTERACTION BETWEEN STRUCTURES IN CONCEPT
LEARNING MATERIAL AND THE PERSONALITY TYPES
OF LEARNERS

Davinder Kaur
J.R.F., D.P.S.E.E.,
NCERT, New Delhi.

ABSTRACT

Present study was aimed at to identify the interaction between concept learning and personality types of learners. A sample of 120 7th grade students were administered an intelligence test. Dropping out 30 extreme cases in order to negate intelligence, remaining 90 subjects were administered Junior Personality Inventory. On the basis of mean+SSD subjects were divided into three categories for extroversion (E^- , E , E^+) and three for neuroticism (N^- , N , N^+). In each category there were nine subjects. In the final stage three subjects from each category were assigned for teaching through Bruner (1963), Ausabel (1963), and Gagne' (1965) models. Results show that structures in learning material and personality types have significant effect on concept learning, personality variables do interact with learning material.

A concept is a mental image of a thing formed by a generalization from particulars; also an idea of what a thing in general is to be. Russell writes in the Encyclopedia of Educational Research(1960) "Concepts are learning that permeate thinking", and they are marked by "Consistency of differential, generalized, symbolic response" Vygotsky (1962) considers, "concept as an active part of the intellectual process, constantly engaged on serving communications, understanding and problem-solving." He further points out that, "a concept is not an isolated and changeless formation but it is formed through "the interplay of associations in which all the elementary mental functions participate in a specific combination".

W.E. Vinacke(1973) in his book, "The Psychology of thinking" summarises "A concept is basically a system of learned responses, the purpose of which is to organise and interpret the data provided by sense perception. Past experience is automatically applied to present contingencies through the use of concepts".

Concepts are not particular but classes of stimuli or events. If we were forced to respond to each stimulus we encountered as unique, the complexity of the world would overwhelm us. Archer (1966) suggests that reducing the complexity of the world takes on the character of string the individual tries not only to reduce complexity in chaotic environment but also "to seek and search out peculiarities and differences in the elements in its environment in order to minimize its environmental complexity."

The learning of concepts, therefore, enables the individuals to grasp in an array of environmental stimuli, similarities and differences which he would otherwise have great difficulty coping with.

Learning of concepts among children depends on many variables and out of those, structuring of task is important. In recent years there has been an increasing amount of attention devoted to structural aspect of knowledge (i.e. knowledge of the conceptual interrelationships in a set of material). Among the possible reasons for the increased level of interest in structural knowledge is a practical one. It appears highly plausible that the everyday usage of knowledge (School learning in job setting) would require some understanding of the conceptual

interrelationship that exists within a given body of information. There are many individual differences which affect student learning: background knowledge, competence in necessary cognitive skills, general intelligence, physical disabilities, attitude and personality; School systems usually take explicit steps in their programmes to take account of these but the last two are generally neglected. The effect of student's attitude on learning is an important area of research, however, attitude measures are much less stable than personality measure. This makes the better a more promising area of study particularly towards the goal of developing principles for individualising teaching strategies so much important and yet lacking in the present educational system.

The effect of personality variables may further vary depending upon the teaching models used by the teacher. A teaching model is a prescription for a sequence of moves to be made in the teaching learning process. These teaching models to teach concepts are available in research literature which can be fruitfully utilised by a teacher in individualised teaching.

Burner(1967) formulated his theory of knowledge acquisition, according to which, an individual possesses three parallel models of information processing, namely Eactive, Iconic and symbolic. Burner and his colleagues (1967) emphasize the importance of categories, as a learner seeks to make sense of the diverse stimuli that come from his environment. To use words, we "render discriminately different things equivalent..... .. respond to them in terms of their class membership rather than their uniqueness."

The effect of these three models through instructional media may not be identical in terms of concept learning as pupils have different types of personality. Two dimensions i.e. Neuroticism/stability and Extroversion/introversion of personality on the basis of Eysenck's theory have been taken into consideration in the present study.

OBJECTIVES

The present study was undertaken with the following objectives:-

- (1) To examine the effect of different teaching models on concept learning

- (2) To study the effect of extroversion on concept learning
- (3) To study the effect of neuroticism on concept learning
- (4) To evaluate the interactional effect between structure in concept learning material and extroversion.
- (5) To analyse the interactional effect between structure in learning materials and neuroticism.

HYPOTHESES OF THE STUDY

The study was advanced on the basis of the following hypotheses:-

- (1) Significant differences in treatment outcomes in terms of concept learning will emerge due to three teaching models.
- (2)(a) Extroversion contributes significant differences in treatment outcomes in terms of concept learning.
- (b) Significant interaction will be found between structures in learning materials and extroversion causing variation in treatment outcomes in terms of concept learning.
- 3(a) Neuroticism contributes significant differences in treatment outcomes in terms of concept learning.
- (b) A significant interaction will be found between structure in learning material and neuroticism causing variation in terms of concept learning.

There are many teaching models best for the present study there well known teaching models based on the theories of Ausubel, Bruner and Gagne have been used.

According to Ausubel (1963), all learning is meaningful learning. In this theory, the most important principle is called subsumption. Meaningful learning takes place, according to this theory, when a new idea is subsumed into related structure of already existing knowledge. This link is called the "advance organizer", or "Cognitive bridge" (Nevak, 1977).

The second model to be studied is that of Gagne (1965 & 1970). This would pay great attention to an hierarchy of concepts, which, he says are implicit in the discipline being studied (Gagne & Bruner, 1961), Gagne(1962) Gagne & Briggs (1974). Gagne's classification or task analysis is essentially a hierarchical structure which specified, as its apex, the task to be learned and the subdivision which go to make up the task. The teacher, thus, according to the models designed on Gagne's theory examines main idea to be taught and orders hierarchically all the concepts and skills needed for the attainment of the idea.

DESIGN

The present study has been conducted with the help of factorial design of analysis of variance 3x3 technique involving three teaching models i.e. developed by Ausubel(1960. 1963 & 1969), Burner(1967) and Gagne(1962 and 1965), and two dimensions of personality i.e. extroversion and neuroticism at three levels each, i.e. H+N and N- E+E and E- respectively. Scores of extroverts and neurotics were taken separately while classifying the groups and analysing the data which necessitated a replication of the design(i.e. 3x3) the criterion variable was concept learning.

SAMPLE

Sampling technique was resorted to at three stages. A sample of 120 subjects belonging to 7th grade was taken and intelligence test was administered. To equate the intelligence of all the subjects. Extreme cases were eliminated. At the second stage Junior Personality inventory was administered to the 90 subjects of equal intelligence, on the basis of mean + S.D., subjects were divided into three category for extroversion i.e. E+ E&E- and three for Neuroticism i.e N+ N&N-. In each category there were nine subjects and total was 54.

At the final stage three subjects from each category were assigned for teaching through each model. Hence 18 subjects were taught through each model.

Conclusions drawn according to all the hypotheses are as follows:-

(1)(a) Structures in learning material have significant effect on concept learning.

(b) Structure in Gagne model produced best outcomes in terms of concept learning and the structure in Bruner's model produced last outcomes.

(c) High structuring is more effective as compared to less structuring.

(d) Higher is the structuring in learning material, greater is the acquisition of the material.

2.(a) Personality has significant effect on concept learning.

(b) The performance of introverts on concept learning was better than the extroverts as well as average subjects.

(c) The performance of Group 'E' on concept learning was best and of 'E*' was worst.

2(b) (a) Personality types of students do interact with structures in learning materials.

(b) Subjects taught under Ausubel's model performed better on concept learning than the introverts.

(c) In group taught under Gagne's model performances of introverts was better than the extraverts.

(d) In group taught under Bruner's model there was no significant differences between the performance of extraverts and introverts.

3(a)(a) Personality is a significantly effective variable.

(b) Neutrotics performed better than the stables.

(c) The performance of group N⁺ was best and of group N₋ was least an concept learning.

3. Personality variables do interact with structures in learning material.

References

- Ausubel D.P. (1962) A Subsumption Theory of Meaningful Verbal Learning and Retention Journal of Genetic Psychology. 66, 213-224.
- Gagne, R.M. (1965) Conditions of Learning. Holt Rinehart & Winston, New York.
- Bruner, J.S. (1971) The Growth of Mind in M.D. Glucks(Ed.). Guiding Learning: Readings in Educational Psychology. John Wiley & Sons, New York.

3.1.

JOB SATISFACTION AND NEVROTTICISM

Jai Dev Bakshi

Monika Mehra

Department of Psychology,

Patna Hospital

A B S T R A C T

The aim of the present study is to study the relationship of job satisfaction and neuroticism among skilled and unskilled workers. A sample of 200 male workers were administered. A Job satisfaction scale twenty three and 28 high job satisfied (HJF) and 28 and 22 low job satisfied (LJF) subjects were identified from skilled and unskilled workers, respectively. These groups were then administered Maudsley Personality Inventory to measure stability. Results show that age and educational qualifications are not related with job satisfaction while job experience and number of dependents are related with the same.

INTRODUCTION

Job satisfaction is a positive feeling towards the job in which one is engaged. Locke(1976) defines it as " a pleasurable or positive emotional state resulting from the appraisal of one's own job experience." Many researches has been conducted on job satisfaction, but Herzberg et al (1959) have significant contribution in the field of job satisfaction. They classified it into two factors-hygienic and Motivational factors. Hygienic factors-related to job environment and comprised of pay, company policy, technical supervision, interpersonal relationship with colleagues, supervisors and juniors, status security, working conditions etc. second category related with the job itself constituted of recognition, advancement, achievement, responsibility etc.

Further, he found that motivating factors like work itself, advancement, recognition, responsibility etc. were major factors contributing to job satisfaction and their absence would not lower down satisfaction. The factors classified as hygienic factors like technical supervision, working conditions company policy etc were examined as the causes of job satisfaction with little potentiality to let job attitude rise in the positive direction.

Waters and Waters(1969), Julin (1971), Wall (1973) has criticised the generality of the theory. They condemned it on the basis of methodology and reliability of the research tools Porter(1961) stressed over the need of the individual

3.3.

The individual gets gratification only by need fulfilment through his job.

Neelay (1973) also has hypothesised that the individual gets job satisfaction through the satisfaction of lower needs if the subjects are not, or frustrated from them. It leads towards dissatisfaction if the subjects lower needs are gratified, he will get satisfaction by gratifying the higher need.

But if we think rationally we can hypothesised that neuroticism also contributes to job satisfaction. The present study is an attempt to study the relationship of neuroticism and job satisfaction among skilled and unskilled workers and relationship between age, educational qualification, number of dependents and work experience have also been studied with the job satisfaction.

Method of Study.

Tools used: 1. Job satisfaction Scale

2. Moudeslay Personality Inventory

Sample The sample of the present study constitutes of 200 male workers (100 skilled and 100 unskilled). They were selected randomly from Vinod Paper Mill and Airhart Spinning Mill of Malerkotla(Punjab). The investigators themselves constructed the five-point scale to measure the job satisfaction.

3.4.

Procedure: The subjects were administered job satisfaction scale. High job satisfied(H.J.S.) and low job satisfied(L.J.S) from skilled and unskilled group were selected i.e. skilled group:23 highly satisfied and 18 low job satisfied, unskilled group 28 H.J.S. and 22 L.J.S. These subjects were administered moudeslay personality Inventory to measure the neuroticism and stability. The investigators analysed only those questions of this inventory which are related with neuroticism and stability. For computation of demographic variables(age, educational qualifications, number of dependents and work experience), Chi-square technique is used and for computing relationship between job satisfaction and neuroticism, 't' value is used:

RESULTS

AGE: SKILLED WORKERS

Table -1

	<u>20-35 years</u>	<u>36-50 years</u>	<u>51 years & above</u>
H.J.S.	10	6	7
L.J.S.	8	4	6

$\chi^2 = 1.32$ insignificant at .05 level

Table -2

	<u>20-25 years</u>	<u>36-50 years</u>	<u>51 -above yrs</u>
H.J.S.	6	12	10
L.J.S.	10	8	4

$\chi^2 = 1.76$ Insignificant at .05 level

Table 3

WORK EXPERIENCE: SKILLED WORKERS

	<u>3-5 years</u>	<u>6-8 years</u>	<u>8-above yrs</u>
H.J.S.	12	3	8
L.J.S.	3	3	12

$\chi^2 = 6.20$ significant at .05 level

Table 4

UNSKILLED WORKERS

	<u>3-5 years</u>	<u>6-8 years</u>	<u>8-above yrs</u>
H.J.S.	14	6	8
L.J.S.	4	6	12

$\chi^2 = 6.40$ significant at .05 level

Table 5

EDUCATIONAL QUALIFICATIONS: SKILLED WORKERS

	<u>Illiterate</u>	<u>Under Matric</u>	<u>Matric & above</u>
H.J.S.	8	8	7
L.J.S.	6	4	8

$\chi^2 = .48$ insignificant at .05 level

Table 6

UNSKILLED WORKERS

	<u>Illiterate</u>	<u>Under Matric</u>	<u>Matric & above</u>
H.J.S.	12	9	7
L.J.S.	8	8	6

$\chi^2 = 1.48$ insignificant at .05 level

3.6.

Table-7

NUMBER OF DEPENDENTS: SKILLED WORKERS

	<u>2-4</u>	<u>5-7</u>	<u>8 & above</u>
H.J.S.	14	5	4
L.J.S	5	3	10

$\chi^2 = 9.30$ significant at .05 level

Table-8

UNSKILLED WORKERS

	<u>2-4</u>	<u>5-7</u>	<u>8 & above</u>
H.J.S.	12	10	6
L.J.S.	4	6	12

$\chi^2 = 1.79$ significant at .05 level

Table -9

Mean of Scores of neuroticism of H.J.S. Group	Mean of Scores of neuroticism of L.J.S. group	t
SKILLED 52.40	25	3.10*
UN SKILLED 64.90	50.4	3.25 *

Significant at .05 level

DISCUSSION:

Job Satisfaction is the result of on-the-job and off-the job factors. Neuroticism is a characteristics of human behaviour, which influences and difert the view towareds job experiences. Results discussed above are following.

3.7.

Table Nos. 1, 2, 5 & 6, show that age and educational qualification are not related with job satisfaction among skilled and unskilled workers, these results are supported by the studies conducted by Natraj & Hafeez(1965), Sinhas and Nair(1965) and Rao(1970).

Table Nos. 7, 8, and 3, 4 shows that work experience and number of dependents are related with job satisfaction Sinja & Sharma, Sinja and Nair, Cosh and Shula has not found out no relationship between number of dependents and job satisfaction.

Here in this study we find job experience is related with job satisfaction whereas age has no relationship with job satisfaction. These results do not contradict each other. In fact, this contradiction is more illusory rather than more revealing. It points out that more experience on the job may mean more experience. We have to keep in mind that these job experience are not the two facts of the same coin. What is true for job experience may not be true for age.

Table No. 9, that significant difference exist between mean neuroticism scores of HJS and LJS persons for both the skilled and unskilled group of workers.

REFERENCES:

1. Herzberg, F. Maslow, B. Snyderman, B. Motivation to Work. New-York Wiley, 1959.
2. Hulin, C.L. and Waters, L.K. Regression Analysis of three Variations of Two Factors/of applied psy. 1971, 55, pp.211-217. / Journal
3. Locke, E.A., Nature @ Causes of Job Satisfaction. From a handbook of Industrial & Organisational Behaviour. Edited by Marvin. D. Dunnette. Rahel Mc. Nally: College of Publishing Company Chicago, 1976, 0.1318.
4. Narraj C.L. & Hafeez, A.A., Study of Job Satisfaction Among Skilled Workers. Indian j. of Social Worker's 1965, 26, pp.9-15.
5. Neclay, J.B. Jr. A Test of Need Gratification Theory of Job Satisfaction, J. of Applied Psy. 1973, 57(1) pp.86-88.
6. Porter, L.W. Job Attributes in Managements, Perceived Deficiency in Need Fulfillment as a Function of both Level. Journal of Applied Psy. 1962, 46, pp.375-84
7. Sinha, D. & Sharma, K.C. Union Attitudes & Job Satisfaction in Factory Workers. Indian j. of Social Work's 1962, 46, pp.247-51
8. Sinha D. Nair R.R., A Study of Job Satisfaction if Factory Workers. Indian j. of Social work's 1965, 26, pp.1-8
9. Wall, T.D. Ego Defensiveness Determinants of Reported Differences in Source of Job Satisfaction. g of applied Psy. 1973, 58 pp.125-128.
10. Garrett, H.E., and Woodworth R.S., Statistics in Psychology and Education Vikas Niffer and Simon Pvt. Ltd., Bombay p.142
11. Water, L.K. and Waters C.L., Correlated of Job Satisfaction and dissatisfaction among Female Workers. J. of Applied Psy. 1969, 53, 388-391

RELATIONSHIP OF INTELLECTUAL DEVELOPMENT
WITH ACHIEVEMENT OF XI GRADE SCIENCE STUDENTS

Santosh Kumar
IMES&IP
NCERT,
New Delhi.

ABSTRACT

This Piagetian developmental psychology based study, aims at to study the intellectual development of adolescent pupils in relation to their academic achievement in different science subjects. A sample of 265 XI grade students in the age range 15 years - 17 years were administered Raven's Verbal Reasoning Test. Achievement in Science subjects were recorded from their Board examination marks. Results show that significant and positive relationship exists between total scores of intellectual development and achievement scores in science subjects and in total achievement scores for both boys and girls.

The researches in the development of intellect of children are gradually becoming an important area of concern for education and psychology. Cognitive development work is always associated with Jean Piaget, the chief advocate of Geneva school of thoughts. The abstract thinking or as Piaget has termed it formal operational thinking is characterised by the ability to go beyond, concrete reality to the hypothetical all possible combinations of events, either real or possible are considered in an exhaustive way and empirical proof can be offered. Problem both real and hypothetical can be conceptualised. He further asserts that children of 15 to 17 years of age attain formal operational thinking or reasoning abilities to solve any problems related with personal and life. He has defined four stages of cognitive development the sensori-motor, pre-operational, concrete and formal stage.

Adolescent pupils shows a wide variety of intellectual behaviours, while confronted with those problematic situations which do not require any specialised knowledge for their solutions. So education for understanding and problem solving is gradually becoming the chief goal of instruction in our times. The role and need of logical thinking in science learning being different from repeatable knowledge as the primary focus in the classroom to as a focus on what the students are doing cognitively (the mental operations involved) and how students feel about it.

In the present piece of work the investigator was especially interested to study the intellectual development of adolescent pupils in relation to their academic achievement in different science subjects viz. Physics, Chemistry, Biology, Mathematics. It was thought the mental structure or logical operations developed during adolescence, help in better understanding of science subjects. Since these subjects vary widely in dealing with simple to abstract concepts, The range of complexities of concepts can be classified in subjects as Physics, Mathematics, Chemistry and Biology. In other words, the teaching of these subjects may either hinder or facilitate the intellectual development of the adolescent pupils.

Purpose of the Study:

The present study was undertaken with the following objectives.

1. to study the proportion of science adolescent students at concrete, transitional and formal operational levels of Intellectual Development.
2. to study the extent of relationship between scores of intellectual development and academic achievement in science subjects, viz., Physics, Chemistry, Biology, Mathematics and grand total of marks of boys and girls science adolescent students.
3. to study the extent of relationship between achievement in science subjects and stages of intellectual development (Concrete, Transitional and Formal).

RESEARCH HYPOTHESES

1. Majority of the science adolescent students are at formal operational levels of intellectual development.
2. There is no significant relationship between intellectual development and achievement in science subjects.
3. There is no significant relationship between achievement in (i) Physics (ii) Chemistry (iii) Biology (iv) Mathematics and (v) total achievement scores and levels of intellectual development in boys and girls adolescent students.

The Sample

The sample for the present study was consisted of 265 (139 boys and 126 girls) students (age range 15-17 years) drawn randomly from 6 Higher Secondary Schools of Ajmer City. Only such schools were selected where the science is taught as optional group and the medium of instruction is Hindi.

Tools: Measure of Intellectual Development

The measure of intellectual development was obtained on Raven's Verbal Reasoning Test. This is paper pencil test and logical operations were identified from an analysis of the growth of logical thinking (Inhelder and Piaget, 1958, 1964).

Measure of Academic Achievement

The measure of academic achievement in science subjects (Physics, Chemistry, Biology and Mathematics) was based on the marks obtained by the students in secondary school examination.

conducted by Board of Secondary Education, Rajasthan, Ajmer.

Collection of Data:

Data for the study was collected systematically and sequentially keeping in view all the instruction supplied by authors in their manual.

Analysis & Interpretation of Data

The basic purpose of the present investigation was to find out the extent of relationship of intellectual development with achievement in different science subjects of the higher secondary science students belonging to both sex and different types of schools.

In the present study, Raven's Verbal Logical Reasoning Test was used to classify the sample population into three levels of mental development, that is, concrete transitional and formal operational levels.

The proportion of science adolescent students reaching at Concrete, Transitional and Formal levels of intellectual development was computed in percent and area presented in Table-I.

TABLE-I

Distribution of Science Adolescent Students at
Different Levels of Intellectual Development

S. No.	Group	Type of School	N	Science Adolescent Reaching at		
				Concrete Level %age	Transit- ional Level %age	Formal Level %age
1.	Total Sample	Boys and Girls				
		Schools	265	12.45	69.81	17.74
		(i)Govt. Schools	91	17.58	67.03	15.38
2.	Boys	(ii)Private Schools	48	4.17	66.66	29.16
		Total	139	12.94	66.92	20.14
3.	Girls	(i)Govt. Schools	85	14.11	70.06	15.29
		(ii)Private Schools	41	7.31	78.06	14.63
		Total	126	11.90	73.01	15.07

Table I given above presents an overall idea of the actual levels of attainment of the study sample at different levels of their intellectual development. At glance, the following trends can be observed:

- (1) Majority of the science adolescent students, say 70% are at the transitional levels of intellectual development.
- (2) Only about 18% of the total population are found at Formal Operational levels of Intellectual Development.
- (3) About 13% of adolescents still remain at concrete operational thinking level.

- (4) Regarding the sex-differences, it can be observed that boys lead in their attainment of Formal Operational thinking level (20.14%) than girls (15.0%).
- (5) Percentage of girls reaching at the Transitional level of intellectual development is slightly higher (73.01%) than the percentage of boys (66.94) reaching at the same level.
- (6) There is no difference in percentage of boys and girls lying at concrete level of the intellectual development.

Interrelationship between Intellectual Development and Achievement in Science Subjects

Table-II given below summarises correlation between scores of intellectual development and academic in Physics, Chemistry, Biology, Mathematics and grand total of marks. The achievement scores were the marks secured by the sample subject in secondary school examination, conducted by Board of Secondary Education, Rajasthan. The grand total of marks is the total performance of the children in all subjects including subjects for general studies.

TABLE-II

Correlations Between Achievement in Science Subjects and Total Achievement Scores and Scores for Intellectual Development

S. No.	Subjects	Boys			Girls		
		N	r	Level of Sign.	N	r	Level of Sign.
1.	Physics	139	0.801**	.01	126	0.397**	.01
2.	Chemistry	139	0.850**	.01	126	0.168	NS
3.	Biology	41	0.374**	.01	100	0.277**	.01
4.	Mathematics	92	0.631**	.01	26	0.456*	.05
5.	Total Achievement	139	0.707**	.01	126	0.389**	.01

NS = Not significant

* = Significant at .05 level

** = Significant at .01 level

At glance, in the above Table all correlations except one or two are highly significant at .01 level of significance.

The correlation between scores of intellectual development and the scores in Physics are 0.801 and 0.397 for Boys and Girls respectively. Both correlations are significant at one percent level of confidence. Similarly, the correlations between intellectual development and achievement in Biology subjects are highly significant (.01 level) the correlations between achievement in Chemistry subject and the scores on Intellectual Development Test is 0.850 for boys adolescent

which again is highly significant. Only the correlations between achievement in Chemistry and intellectual development for girls found to be 0.168, which is insignificant. The correlations between Mathematics subject and intellectual development are significant for both boys and girls, But, it is highly significant (.01 level) in case of boys than girls (.05 level). The correlations worked out between grand total marks and scores of intellectual development are also highly significant (.01 level).

These results indicate the significant and positive relationship between Intellectual development and Achievement in science subjects. Thus the hypotheses No.2 is rejected.

Interrelationship between Achievement in Physics, Chemistry, Biology, Mathematics and Total marks and Formal Transitional and Concrete Operational Thinking

The next step was to find out the relationships between each science subject and grand total of all subjects with different places of development viz. formal, transitional and concrete operational thinking. The correlation values along with significance have been given in Table-II.

TABLE - III

Correlations between Achievement in Physics, Chemistry, Biology, Mathematics and Total marks and Concrete, Transitional and Formal Operational Thinking

Subject	Operational Stage	N	BOYS		Level of Sign.	N	GIRLS	
			r				r	Level of Sign.
Physics	Concrete	12	0.124		NS	15	0.377	NS
	Transitional	93	0.321**		.01	92	0.271**	.01
	Formal	28	0.310		NS	19	0.336	NS
Chemistry	Concrete	18	0.217		NS	15	-0.170	NS
	Transitional	73	0.573**		.01	92	0.516**	.01
	Formal	28	0.279		NS	19	0.462*	.05
Biology	Concrete	7	-0.442		NS	12	0.216	NS
	Transitional	32	0.286		NS	73	0.031	NS
	Formal	8	0.013		NS	15	0.172	NS
Mathematics	Concrete	11	0.445		NS	3	0.341	NS
	Transitional	61	0.922**		.01	19	0.012	NS
	Formal	20	0.209		NS	4	0.494	NS
Total	Concrete	18	0.421		NS	15	0.314	NS
	Transitional	93	0.181		NS	92	0.035	NS
	Formal	28	0.235		NS	19	0.178	NS

NS = Not Significant

* = Significant at .05 level

** = Significant at .01 level

Entries in Table-III are self explanatory still need some elaboration. It is clearly shown that no significant relationship between biology marks and total achievement score and different levels of intellectual development. However, significant relationships between Physics, Chemistry and Mathematics (only for boys) achievement and only with transitional level of intellectual development were obtained. Thus the hypothesis no.3 is accepted in case of the relationship between levels of intellectual development and Biology marks and total achievement and rejected in case of intellectual development and achievement in Physics, Chemistry and Mathematics marks.

Conclusions

From the results obtained above by analysis and interpretation of data, the following trends can be observed.

1. A Significant and positive relationship exists between total scores of intellectual development and achievement scores in science subjects viz. Physics, Chemistry, Biology and in Total achievement scores for both boys and girls science adolescents students.
2. The obvious trend between achievement in science subjects (Physics, Chemistry, Biology and Mathematics) and concrete and Formal operational thinking levels of intellectual development is that of no relationships. In other words, No relationship is found to exist

between scores of achievement in science subjects and the scores for stages (Concrete and Formal) of intellectual development.

3. A high and significant relationship is found between achievement in science subjects and transitional operational thinking stage of intellectual development.

The finding of no relationship between achievement in science subject and concrete and formal operational thinking was not suprising. As has been reported earlier, concrete operational thinking comprises of classification, seriation, logical multiplication and compensation abilities and whereas Formal operational Thinking consists of Proportional, Probability and Combinatorial abilities. The Achievement tests in science subjects do not hinge on these operations but are based by and large measure K-R, translation, interpretation, analysis etc. (in Bloomian sense). Therefore, looking to the test contents of these two kinds of test materials, one would predict that in general no relationship should exist between achievement in science subjects and concrete, formal operational thinking abilities.

However, the discreant relationship between achievement in science subjects and transitional operational thinking is difficult to explain. More studies should be conducted either to confirm or refute this.

BIBLIOGRAPHY

- Ball, D.W., and S.A. Sayrer. "Relationship between Student Piagetian Cognitive Development and Achievement in Science". Unpublished Doctoral Dissertation University of Northern Colorado, Greeley, 1972.
- Chiappetta, E.L. "Determining the Relation Between Proportional Thought and Physical Science Achievement". Paper Presented at Texas Academy of Science, North Texas State University, Denton, Texas, March, 1974.
- Chiappetta, E.L. "A Review of Piagetian Studies Relevant to Science Instruction at the Secondary and College Level". Science Education, 1976, 60(2), 254-261.
- Eluind, D. "Piaget and Science Education". Reshaping Our School Science Education Eds. N. Vaidya and J.S. Rajput, Oxford and IHB Publishing Company New Delhi, 1977.
- Gatewood, C. "The Science Curriculum Viewed". National Science Teacher, 35, 18-21, 1968.
- Inhelder, B., and J. Piaget. The Growth of Logical Thinking from Childhood to Adolescence, New York: Basic Books, 1958.
- Inhelder, B. and J. Piaget. The Early Growth of Logic in the Child. New York: Harpur and Row, 1964.
- Khire, M. "The Liberal Education Values of Mathematics, Science and Technology for Youth". In Addresses and Proceedings. Washington, D.C. National Education Association, 50-67, 1965.
- Kolodiy, G.O. "Cognitive Development and Science Teaching". Journal of Research in Science Teaching. 14(1) 21-26, Jan. 1977.
- Lawson, A.L. "Relationship of Concrete and Formal Operational Science Subject Matter and the Development Level of the Learner". Paper Presented at the National Association of Research in Science Teaching. Convention, Chicago, April 1974.

- Lawson, A.E. and Renner, J.W. "Piagetian Theory and Biology Teaching". Am. Biol. Teach. 1975, 36(6) 336-343.
- McKinnon, J.W. and J.W. Renner. "Are College Concerned With Intellectual Development?" American Journal of Physics, 39, 1047-1052, 1972.
- Nordlund, E., A.E. Laidson and J.B. Kahle, "A Study of Levels of Concrete and Formal Reasoning Ability in Disadvantaged Junior and Senior High School Science Students". Science Education 58, 4, 569-575, 1974.
- Piaget, J. "Science of Education and Psychology of Child" New York: Basic Books. 1970.
- Piaget J., "Intellectual Evaluation from Adolescence to Childhood" Human Development, 15, 1, 1-12, 1972.
- Raven, J.W. and D.G. Stafford. "Teaching Science in the Secondary School" Harper and Row. New York, 291-296, 1972.
- Raven, J.R. "Programming Piagets Logical Operations for Science Inquiry and Concept Attainment". Journal of Research in Science Teaching, 251-261, 1974.
- Viadya, N. "A Study of Some Aspect of Piaget's Work and Science Teaching, New Delhi, S. Chand and Co.
- do- "A Study of Some Aspect of Thinking Among Science Students of Adolescent Age". Ph.D. Thesis, Raj. University, 1974.
- do- "The Growth of Logical Thinking in Science during Adolescence". New Delhi, Oxford and IBH Publishing & Co., 1979.
- do- "Researches on Adolescent Thought," Ajmer, RCE.
- Wottman, W. et al. "The Meaning of Formal Thinking and Its Relation to Science Teaching". Paper California NARST, 49th Annual Meeting, 1976.

PERSONALITY PATTERN OF
OVER AND UNDER ACHIEVERS

Surya Mani Mishra
Faculty of Education
Jamia Millia Islamia
NEW DELHI-25

ABSTRACT

In the present study standard progressive Matrices was administered on a sample of 172 VIII Class students (86 boys and 86 Girls) Academic achievement students was ensured by calculating average of the marks of the terminal examination. Scores on SPM marks in the two terminal examination were converted into Z scores and on their capability overachievers(35) underachievers(35) were identified. The sample of over and under achievers were then administered Parsi Panchayat Personality Inventory. Results show that over and under achievers do not have different personality patterns as is popularly believed.

INTRODUCTION

Pupil achievement in a school system is a pervasive. It indicates what the pupil achieves by studying the curriculum in terms of information, understanding, skill improved reasoning ability apprehending future needs problems and preparation for meeting those needs adequately and developing such abilities and attitudes as would equip the learner to function effectively in his society. If achievement is given such comprehensive Meaning the concept would be such that the life goals and aspiration of the individual learner should be realised by studying the context and in turn the evaluation procedure should be comprehensive enough to enable the evaluation to judge the ability of the Learner in connection with all the aspects such as cognitive, Conative and effective developed by studying this prescribed content.

At present the achievement is limited to the pupils ability to gather information a little bit of understanding and reasoning ability. It is believed under normal conditions. Students will achieve academically at par with their intellectual standing as measured through tests of general intelligence. From the foregoing notion of intellectual ability contributing towards scholastic achievement stem out two other concepts. One is over achievement pupils whose academic achievement is higher than the expected achievement on the basis of intellectual standing are called over achievers. Second is under achievement, pupil whose academic achievement is lower than the expected achievement on the basis of intellectual

5.3.

standing are called under achievers. The expectation that a pupil would achieve academically as par his intellectual ability seem to be over simplification of complex phenomenon of mental functioning where in motivational factors and other environmental factors must be intervening either as boosters or impellers. A probe at the intervening factors may reveal ways and means as regards counter acting the detrimental influence of such factors, If any/^{on} one hand and furthering and strengthening contributory factors on the other. Such probe should be best carried on an individual basis which is time consuming and would require much of resources. If on the other hand a pattern of characteristics is determined for ever and underachievers then the characteristics which invariably improve achievement may be located, and further it may be possible to introduce new motivational factors to cite interest and create readiness for better achievement at different levels of schooling.

Since personality characteristics do not activate the as isolated traits, it is desirable to study the pattern of traits for providing motivation for academic pursuits and improved achievement.

What should be the specific approaches for creating learning situation, pupil engagement way of instruction-mode of evaluation will be largely dependent on the characteristics of the learner. Hence homogeneous grouping of learners will be based not only on the ability factors but also on that personality characteristics.

5.4.

and environmental accompaniments too.

OBJECTIVES - Specifically stated as:

- * Identifying the extent of under and over achievement
- * Studying the personality Characteristics of over and under achievers
- * Visualising the personality characteristics which ensure sustained effort as in case of over achievers.
- * Determining such Characteristics as cause drop out from academic pursuit.
- * Recommending instructional methods for eliminating distracting impulses afflicting the under achievers.
- * Recommending learning situation that would sustain the effort made by over achievers.
- * Recommending approaches and methods for improving methods of instruction and development of intensive study habits.

Methodology: Sample and tools used

Standard Progressive Matrices was administered on a sample of 172 students (86 boys, 86 girls) from co-educational and single (both boys and girls) schools from both rural and urban areas in and near BHUBANESWAR. The students belonged to class VIII. Academic achievement of the students was determined by computing the overage of their aggregate marks in two consecutive terminal examinations. The raw score obtained by each student on Raven's standard Progressive Matrices and his average aggregate marks was converted into 'Z' scores to establish comparability between intellectual ability and academic achievement. A discrepancy of one standard score or more has been taken as the criterion for levelling a student as underachiever or over-achiever. In other words if the achievement Z score is less than the Z score on SPM. By one or more than the student is taken for underachiever and the reverse is the case for levelling one as over-achiever.

Parsi Panchayat Personality Inventory has been administered on 24 over achievers and 26 under achievers. The rest 7 over-achievers and under-achievers were absent. The Inventory which was standardised on a small sample consisting of 232 boys and 184 girls belonging to 7 Boys High School and 9 girls High School in Urban at Bombay in the year 1960. The test consists of 72 items having six personality dimension like, Extraversion- Intreversion, Sociability, Emotional stability, Neurotic tendency, Domiance-submission, verbal meter

- Analysis and Findings-

Incidence of both the over and under achievers was about one fifth of the total group number. Over achievers 18.02% and under achievers 20.35%. Over achievement in the maximum at Lower intellectual level, under achievement occurred normally at normal intellectual level.

There is little stress on utilisation of intellectual powers with more emphasis on Memory work. A further probability is that the students physical and social environment is not enriched enough to cater to the need of one to hold the interest of students of higher intellectual level. Underachievement occurring mostly in the higher intellectual level may be interpreted as giving way to ~~from~~ from academic pursuits. Students of higher intellectual level one perhaps not being able to utilise their talent. If this might be the case for pupils of higher intellectual level, then there is an urgent need of a change in content and teaching methodology suited for higher intellectual level. Another interesting episode is noticed that 25 boys are underachievers as against to 10 girls underachievers, on the otherhand girls over achievers numbered 19 where the boy over achievers are 12. The reason is plain and conspicuous, the boy in our social situation are more open to distraction from which study than girls.

The product moment correlation between intellectual level based on P.P.M. scores (Z-scores) and

academic achievement level of 172 (86 boys and 86 girls) happened to be, 30 which is positive and closely corresponds to that found by Alfred Binet that is 27.

In the administration of Parsi Panchayat personality Inventory the obtained raw scores have been weighted as per the direction described in the manual. Mean weighted score of under achievers and over achievers. Boys & Girls separately and combined have been calculated and the statistical significance of mean differences between the over and under achievers have been calculated for each personality dimension measured by the test. It may be seen that mean difference is not significant in case of 5 dimension but significant in case of dominance-submission dimension to the order of 0.01 level only in case of boys that is boys overachievers tending significantly to be more dominant than boys under achievers. Lastly it is seen that actually over and underachievers do not have different personality patterns as is popularly believed. What to speak of personality patterns causing over and under achievement.

CONCLUSIONS- It is seen from the above discussions that traits like extroversion, sociability and dominance becoming higher in case of over achievers. The following can be drawn:

Learning situations in intellectually stimulating physical environment may be provided. Intelligent students may be taken into field trips to real work situations, say industries,

5.8.

agro- industries, demonstration plots, homeware stay geological survey situation, operation table to see demonstration of complex body functioning. Night classes may beorganised to observe the movements of the stars they may be taken into observations to learn more intricate matters regarding heavenly bodies. In case of Lack of such intellectually stimulating physical environment simpler subjects like a cart a wheel, a plain and curved surface, an inclined plane shape of objects etc. may be exposed to the students illustrating the principles of dynamics and chemistry of objects involved in their working.

- Improving social environment_ the underachievers being socially shy theymay be provided with social situation in the school situation, such social relations established in school situation may be made more intimate. Formal relations should be discouraged. Joint undertaking and assignments of challenging character may be useful in this direction. Our social system are yet to restructure their content timing evaluation system methodology etc. for materialising such goals.

Some earlier studies both corroborating and contradicting the findings of the present investigation.

Tondon.S.(1978) B.H.U. concluded in his study that the male group of underachievers were easy going and out going, emotionally less stable, low in frustration, shy, apt to inferiority feeling, indifferent, pessimistic, moody, depressed and highly anxious, female group of under-achievers were found to be peassimistic.

harash, assentive and highly anxious.

Menon, S.K. Kerala University (1972) study revealed that overachieving groups of boys and girls of superionability as well as the general group were found to be less socially active and masculine.

Bhaduri A. Calcutta University (1971) Pointed out that the over and ^{under} achievers within each sub-sample differed on over one or more of the twenty six variables under study. A variable wise ~~exp~~ showed a certain degree of stability in ~~personality~~ and anxiety. Over-achieving students tended to be less neurotic and less anxious than the under achievers, the group difference was in favour of the over-achievers on social service and out-door interests.

Bhatt.K.K. University school of Psychology-Gujarat-1971 ~~reported~~ that on the ISB, the under achivers showed a relatively better level of adjustment than the over achievers. Content analysis revealed that the difference in the emotional sensitivity of the overachievers and underachievers, and underachievers was a contributory factor from this discrepancy.

At this stage of concluding the report, the investigator is ~~very~~ much troubled as in view of the findings there is occasion to cast doubt on the very concept of underachievement and over achievement based on intellectual ability. If at all such concepts will be tangible the intellectual ability of the pupil will be fully utilised by the instruction and evaluation

5.10

procedures employed in the school situation and the content will be such that intellectual goals will be fully realisable. That way the investigator dares to talk tall by suggesting a thorough restructurisation of the current school education system as took place in speedily developing countries like China, middle-east, Tanzania etc., this is a task which needs urgent attention and requires combined effort of administrators, organisers, teachers, parents, philanthropic agencies and general public.

REFERENCES

Allport G.W. Pattern and Growth in personality

Anastasi A. - Psychological Testing

Best J.W. - Research in Education

Fontanaes - Personality and Education

Gossett H.B. - Statistics in Psychology and Education

Kelly - Assessment of Human Character's

Wiley - The science of Educational Research.

Raven J.C. Manual of standard progressive Matrices.

Shinba D.N. Academic Achiever and Non-achiever.

Sharma Atmanand. Sociometry, a hand-book for Teachers and Counsellors.

Rich M.B. 2nd Survey of Research in Education.

-6.1.

INTELLIGENCE AND REACTION TIME COMPARISON BETWEEN
GOVERNMENT AND CONVENT HIGH SCHOOL STUDENTS

Surinder Kumar Sharma
DEPGC
NCERT, New Delhi.

A B S T R A C T

The study aimed in finding out if there exist any relationship between simple reaction time to a visual stimuli and intelligence as measured by Raven Standard Progressive Matrices(1960) of the Xth Grade students and the extent to which the Government and Convent high School students differ on these two variables.

The simple reaction time approaches and RPM were administered on a sample of 100 Xth grade students 50 from Government high school and 50 Convent high school at Faridabad. Results shows that convent high school students are better on both reaction time and intelligence than the Government School students, and there exists a definite relationship between the two criterion variables.

The study of reaction time and intelligence is one of the earliest problems to be taken up experimentally by the psychologists. Speed of time have its own significance in every field of science. Every act takes time and time can be measured. Speed in both an index of achievement and also an index of complexity of minor processes giving on. The complexities of minor processes, i.e. mental processes, certain neurological processes and cognitive processes involved in various intellectual tasks delays the execution of a particular task if the individual have not been able to master that task. In contrast if the individual has mastered the task more adequately, he can perform it more masterd the task more adequately, he can perform it more quickly, and accurately. Thus the reaction time can be

6.3.

considered as an index of mental development or cognitive development and capacity or efficiency to reason well. If a person's inner processes are not appropriate or are distorted there is more chance that his mental development will be arrested. The reaction time is the S - R time interval. The response can not come out of the organism as soon as the stimuli disappears. A process starts after the removal of stimulus, and this process remain sudden or 'latent' inside the organism till it reaches the muscles and produces an observable effect on the environment. The sense organ must be aroused to activity, the nerves must conduct to the brain and from the brain to the muscles, and the muscles must contract. This physiological process involved in the execution of response to any stimuli is very much affected by certain psychological factors among which intelligence or cognition is one. This physiological process is not merely affected by intelligence, but the end product of it (reaction time) is also the manifestation of our individual's mental development.

Review of Research:

An extensive review of studies conducted on school students and other samples, taking reaction time and intelligence as criterion variables along with other variables such as SES, birth order, family size etc. have shown that while in some of them a definite correlation

has been found, in others very low correlation exist between reaction time and intelligence. Scott, W.C. (1940), in order to determine whether children with high I.Q. differed from that of with low I.Q., on R.T. administered Stanford-Binet Intelligence Scale to 51 children with I.Q. range of 60 to 94 and found that children of I.Q. were faster and were more consistent in reaction time than those of low I.Q. on the basis of results he suggested that the relationship between I.Q. and R.T. may be curvilinear, Penney, J.E. (1938) in a study conducted on a sample of 50 boys and 50 girls aged 5½ years and 25 women with mean age of 22.9, found low positive correlation between auditory reaction time and I.Q. He found small unreliable sex differences on R.T. in favour of the boys.

Arundt, S. and Berger, D. (1978) conducted a study on 24 male graduate students from the fields of sculpture, psychology and law, to test the assumption that an individual's cognitive mode is related to actual laterality in cerebral functioning. A measure of asymmetry of cognitive mode for each student based on relative performance on three verbal analytic tests, viz: WAIS - Block Design, The Extended Range Vocabulary Test and The Word Power Questionnaire, compared to three spatial - holistic tests, viz; The Street Gestalt Completion Test, ETS Gestalt Completion Test and the Collin's Test were taken. He found that the RT to discriminate focus

were less for the right hemisphere, while letters were discriminated faster by the left hemisphere and there was negative correlation between the I.Q. tests and R.T.

Lunneberg, C.E. (1977) describes three studies of 191 high school university students in which choice - R.T. was related to such psychometric abilities measures as verbal comprehension, numerical reasoning, hidden figures and Raven's Progressive Matrices scores. Fairly negative correlation between RT and IQ on these tests was found.

From the above mentioned studies it is evident that there is either negative or low positive relationship between reaction time and intelligence.

Regarding the differences between Convent and Government school students, there is no direct evidence of differences between the two on reaction time and intelligence. But the indirect evidences are available from the studies conducted for finding out the impact of SES on reaction time and intelligence. For example in 1970, Kanji, C and Rafin in a study conducted on a sample of 105 children whose mean age was 3½ years, found that the different socio-economic status groups of the several mental ability on Stanford-Binet Intelligence Scale have different cognitive abilities.

Orv, D.E. and Das, J.P. (1973) also confirmed the impact of

SES on I.Q. in their study, in which they combined high and low SES subjects with average high - low I.Q. levels subject to select in groups of 30. The results suggested a definite impact of SES on intelligence. All these studies pertaining to the influence of SES on intelligence are mentioned here keeping in mind the fact that convent and Government school students, as found in the present study, differ with regard to their father's educational level, father's occupational level, father's monthly income and the facilities available at home. All these wishes indicate an individual's family's socio-economic status.

Methodology

The analyses reported in this paper pertains to the relationship between reaction time to a visual stimuli and intelligence and the comparison between two groups of students differing on socio-economic status on the two criterion groups, i.e. intelligence and reaction time. The earlier studies on the relationship between reaction time and intelligence and the impact of SES on the two provide the scientific rationale for conducting the study. The data on intelligence was collected by administering the Raven's Standard Matrices (1960) in groups, and in reaction time the data was collected by employing the simple Reaction Time Apparatus.

The information regarding the SES of students, they were asked to mention their father's education, occupation, monthly income, size of family and the articles such as TV Radio etc. available at home, on a separate sheet of paper.

The two hypothesis tested in the present study were (i) that there exists a definite positively indicative relationship between intelligence and reaction time, (ii) that there exists a significant difference between Government and Convent School students with regard to there intelligence and reaction time.

The Population:

The population of interest was Xth grade school students in Faridabad (Haryana). The two schools taken-up for the selection of sample were situated in Faridabad, on a distance of 5 km. from each other.

The Sample:

The sample constituted of two group of male students of Xth Grade of 50 each. The students, for the study were selected by following the technique of raundom sampling. In Government High School out of 81 students 50 were selected similarly in Convent High School our of 60 students, 50 were selected.

The Characteristics of the sample can be seen from the breakdown given in Table 1.

T A B L E 1.

Breakdown of the Sample by Mean Age, Income & SES

Groups.	N.	Mean Age	Average Monthly Income	Average Family Size	SES (As Estimated)
Govt. High School Students.	50	14.10	Rs.615/-	5.8	Low-middle
Convent High School Students.	50	14.50	Rs.1,640/-	2.2	High

Variables:

The independent variable was the two group of students Convent and Government school students. The two groups were compared in two criterion variables, namely reaction time and intelligence. Ten readings of reaction time to a visual stimuli were noted down and the average of these were used as scores on this variable. The scoring on Raven's Standard Matrices was done following the manual of the scale.

SES was one demographic variable, regard to which the two groups differed to a substantial amount. An overall index of SES could not be chalked out as information on various

other indices of SES was not available. But it was the general observation that the two groups were not at all match to each other on this particular variable.

Data Analysis, Results and Discussion

Relationship Between Intelligence & Reaction Time:

Applying the statistical technique of Product Moment Correlation, for finding out the relationship between intelligence and reaction time for the two groups separately, the results summarised in Table 2 were found.

T A B L E 2

Relationship Between Intelligence & Reaction Time.

Groups.	r
Government High School Students.	-.25
Convent High School Students.	-.47

The results in the table indicate that the relationship between intelligence and reaction time of the Government high school students is -.25, which although is low but

indicative of definite relationship between the two criterion variables. Here it is worth mention that the negative relationship between reaction time scores, which if high suggests low mental ability and the intelligence scores, indicates the positive relationship. The correlation value in case of the Convent school students is $-.47$ which again suggests the positive relationship. From the results it can be interpreted that the students who are of high intelligence are faster in their visual reaction time, and the students with low intelligence are slower in their reaction time than their counterparts. This confirms the hypothesis that the reaction time of an individual is indicative of his mental capacity, mental efficiency, intellectual and cognitive development and this index can be used for inferring about an individual's cognitive and intellectual development.

Comparison Between Govt. Servent And Convent School Students:

The two groups were compared on the two criterion variables by using the t -Test. The results are summarised in Table 3.

TABLE 3

Comparison Between Government and Convent High School Students on Intelligence & Reaction Time

Groups	Reaction Time					Intelligence				
	N	M	SD	t	df	N	M	SD	t	df
Govt.High School Students	50	38.26	7.78	3.74**	98	50	36.9	5.71	7.71**	98
Convent High School Students	50	32.43	7.20			50	48.1	8.55		

Note: **P \angle .01

The results in the Table 3 show that the two groups differ significantly on intelligence ($t=7.71$, df 98, $p \angle .01$), the intelligence scores of Convent School students being higher ($M=48.1$) than the Government School students ($M=36.9$). The groups also differ significantly on reaction time scores ($t=3.74$, $df=98$, $p \angle .01$), the reaction time of the convent school students being faster ($M=32.43$) than their counterparts ($M=38.26$). All these results not only confirms the fact that Socio-economic status contributes, to the development of intellectual efficiency but also the

fact that intelligence and reaction time are related with each other, the group better at one is also better on the other, in this case the Convent school students.

Summary and Conclusions

The results of the study reveals that the Convent school students are better on both reaction time and intelligence than the Government school students, and that there exists a definite relationship between the two criterion variables. From the results it can be concluded that the reaction time is a very good and useful index for assessing an individual's intellectual or cognitive development. Further the adverse social, economical and emotional environment or conditions exert a great amount of influence on the development of intellectual capacities. These conditions may retards an individual's cognitive or intellectual development and may slow down the reaction time to various kinds of stimuli faced by him in his day to day life. For the efficient and quick response to a particular task or problem his inner processes should be clear, not continued by adverse conditions which may make it more complicated and complex. The complexity of the inner processes may result in the retardation of intellectual development and hinderance to complete or to do a task,

hence prolonging the reaction time. All these realizations on the part of a educationist, researcher, psychologist or a guidance counsellor may help him in understanding certain characteristics of his client's or student's intellectual or cognitive development.

.....

R E F E R E N C E S

- Arundt, S., and Berger, D.E. Cognitive mode and asymmetry in cerebral functioning. Cortex, 1978, 14 (1), 78-86.
- Donders, F.C. Reaction time quoted by Wood Worth and Schlosberg, Experimental Psychology, Revised Edition, 1954.
- Garret, H. E. Elementary Statistics in Psychology and Education, 1969.
- Kanji, G. Socio-economic status in mental retardation. Journal of Social Psychology, 1970, 38 (4), 344-345
- Unneberg, C.E. Measurement of reaction time. Applied Psychology, 1977, 1 (3).
- Orn, D.E., and Das, J.P. I.Q., socio-economic status and short-term memory. Journal of Educational Psychology, 1972, 63 (4) 327-333.
- Pomeroy, J.E. The relation of reaction time of five year old children to various factors. Child Development, 1938, 9, 281-283.
- Raven, J.C. Guide to Standard Progressive Matrices, Sets A, B, C, D and E. H.K. Lewis and Co. Ltd., London, 1960.
- Scott, W.C. Reaction time of Young Intellectual Deviates. Arch Psychology, N.Y: 1940, No. 256, 64.

Relationship of Locus of Control to State-Trait
Anxiety and Self Esteem Among Ninth Grade Children

Trilochan Jena
JPF / DTESES
NCERT, New Delhi -16

A B S T R A C T

Present study was conducted on a sample of 220 IX grade students(110 boys and 110 girls) from Balasore District (Orissa) in order to identify relationship between Locus of control, State Anxiety, Trait Anxiety and Self-Esteem. Rotter's Locus of control scale, Spielberger's State trait Anxiety Inventory and Thomas and Raj, Self Esteem Inventory were used for this purpose. Results shows the internally controlled boys and girls are having more self-esteem than externally controlled boys and girls. The correlation between Locus of control, self esteem and State-trait Anxiety shows that when Locus of control score decreased the self esteem score increases and as well as State-trait Anxiety score decreases.

INTRODUCTION

Our society is multi-cultural, multi-social multi-religious one. The cultural pattern and social pattern influence the formation of life from neonatal stage to old age. The present study deals with the personality variable such as locus of control, self-esteem and state-trait anxiety. People also differ in the degrees to which they believe that they have self control and feel personality for what happens to them.

Operational Definition of the terms used:-

Locus of control:- Rotter defined locus of control as an expectancy variable that describes the perception of personal control that one has over the reinforcement that follows his behaviour. This control is of two types:

a) INTERNAL

An internal person perceives that he has control over his fate and achievement and that effort and reward will be correlated operationally a person checking the material statements of Rotter's Internal-External scale and getting a low score on the scale will be treated as internal.

b) EXTERNAL:

An external person perceives that powerful other's are the 'system' determine how will he can do, that rewards are distributed by such powerful other in a random fashion. Operationally a person checking the external statements of the I.E. scale and getting a high score on the scale will be termed as External.

B. STATE TRAIT ANXIETY

State Anxiety (A State) may be conceptualized as a transitory emotional state on condition of the human organism, that varies in intensity and fluctuations over time this condition is characterized by subjective, consciously perceived feelings of tension and apprehension and activation of the autonomic nervous system.

Trait anxiety (A-Trait) refers to relatively stable individual differences in anxiety proneness, that is to differences in the disposition to perceive a wide range of stimulus situations as dangerous or threatening and in the tendency to respond to such threats with a state reactions.

SELF-ESTEEM

Scholars usually draw a distinction between self-concept and self-esteem, self-concept involves an objective an objective or cognitive appraisal of the self, reflecting self-confidence coopersmith says "Self-esteem is the evaluation by which the individual makes and customarily maintains with regard to himself, it expresses an attitude of approval or disapproval..... It is a subjective experience which the individual conveys to others by verbal reports and other expressive behaviour" It is an individual's perception of his personal worth.

OBJECTIVE OF THE STUDY

(i) To investigate into the relationship among locus of control, state anxiety, Trait anxiety and self-esteem.

7.4

ii) To find out sex differences in locus of control, state anxiety, Trait anxiety and self-esteem.

(iii) To find out differences in state anxiety, trait anxiety, and self-esteem between internal and external boys and between internal and external girls.

HYPOTHESES OF THE STUDY

(i) There exists significant relationship among locus of control, State anxiety, Trait anxiety and self-esteem.

(ii) There exists significant sex difference in locus of control, State anxiety, Trait anxiety and self-esteem.

(iii) Significant difference exists between external and internal boys and external and internal girls in state anxiety, Trait anxiety and self-esteem.

DESIGN OF THE STUDY

Sample:

a) The investigation has taken the sample of 220 students (110 boys and 110 girls) of IX grade students of Balasore district (Orissa). The investigation used the random sampling method on subjects for the present study.

TOOLS USED

i) Locus of control scale (1966) by Rotter's I. E.

ii) State-Trait anxiety Inventory by Spielberger, C. D.

Rosnuch, R. L. and Lushene, R. E. (1970)

iii) Self-esteem Inventory by Immanuel Thomas and Dr. H. Sam
Sanand Raj.

ANALYSIS OF DATA

Looking all the objectives, the investigators applied

Product Movement Correlation and 't' test in order to know the significant correlation and significant sex difference among locus of control, State-Trait anxiety and self-esteem. Like manner 'T' test was applied to know the significant difference between internal boys and girls and external boys and girls State-trait anxiety and self-esteem.

Table I Correlation of Boys & Girls

	1	2	3	4
1		-.16 *	-.14NS	-.10NS
2			-.28**	-.43**
3				-.58 *
4				

Table II Correlation of Boys

	1	2	3	4
1		.02NS	-.09NS	-.01NS
2			-1.00**	-.31**
3				0.45**
4				

Table -3 Correlation of Girls

	1	2	3	4
1		-.28**	-.09NS	-.21*
2			-.46**	-.56**
3				0.1NS
4				

** Significant at 0.1 level
 * Significant at .05 level

- N.S. Not significant
- 1 Locus of control
2. Self-esteem
3. State Anxiety
4. Trait anxiety

Table -4 Sex Difference in Boys+ Girls

Sr.No.	N	Mean	S.D.	SED	(t: value)
1. Boys locus of control	110	10.82	3.06	0.46	-17NS
Girls locus of control	110	10.74	3.63		
2. Boys self-esteem	110	79.41	9.55	1.34	1.28NS
Girls self-esteem	110	81.12	10.30		
3. Boys State Anxiety	110	35.95	3.6	0.5	1.97*
Girls State Anxiety	110	33.97	3.72		
4. Boys Trait Anxiety	110	37.22	4.56	.57	.25NS
Girls Trait Anxiety	110	37.08	3.99		

Table -5 Difference in Internal and External Boys & Girls

S.No.	N	Mean	S.D.	SED	(T) Value
1. Internal State Anxiety (Boys & Girls)	124	34.627	3.686	4.97	.696NS
External State Anxiety (Boys & Girls)	96	34.281	3.625		
2. Internal Trait Anxiety (Boys & Girls)	124	37.194	4.289	.581	.119NS
3. Internal Self-esteem (Boys & Girls)	124	82.806	15.11	1.83	2.86**
External Self-esteem (Boys & Girls)	96	77.573	12.039		

** Significant at .01 level

* Significant at .05 level

NS Not significant

FINDINGS:

- 1) There is negative significant correlations between locus of control and self-esteem for girls as well as overall boys and girls but there is very low insignificant positive correlation for boys.
2. There is positive significant correlation between locus of control and state anxiety for overall boys and girls but positive insignificant correlation for girls. Again there is negative insignificant correlation for boys.
3. There is positive significant correlation between locus of control and trait anxiety for girls as well as overall boys and girls but negative insignificant correlation for boys.
4. There is negative significant correlation between self-esteem and State anxiety for overall boys and girls as well as boys and girls.
5. There is negative significant correlation between self-esteem and state anxiety for overall boys and girls but positive significant correlation for boys and girls.
6. There is positive significant correlation between state anxiety and trait anxiety for overall boys & Girls as well as for boys but there is very low insignificant correlation for girls.
7. There is insignificant sex difference in locus of control scores.
8. There is significant sex difference in State anxiety scores.
9. There is no significant sex difference in trait anxiety score

10. There is no significant difference between internal boys and girls and external boys and girls state anxiety and same also in case of internal boys and girls and external boys and girls trait anxiety.

11. There is significant difference between internal boys and girls and external boys and girls in self-esteem scores.

DISCUSSION AND EDUCATIONAL IMPLICATIONS

It is found from the present investigation that locus of control has significant negative relationship with self-esteem in case of total sample, the same relationship is found in girls though in case of boys it is positive but insignificant. When one becomes external, his/her self-esteem decreases and the latter increases with every increase in internality. To increase self-esteem in students, the parents and the teachers have to create confidence and belief in the students in their own ability being the cause of their behaviour.

In case of total sample and in girls, locus of control is positively related with state anxiety. When one tends towards externality state anxiety increases, and internality lessens the intensity of A-State though mild A-state is favourable to a well balanced and well-adjusted personality. However an excess of it may impair balanced personality development students are to be made to have their perception of personal on their own ability so that it can avoid a severe A-State, Similar is the case with a Trait that

demands an immediate school programme for increasing student's belief in their own ability to produce any kind of behaviour.

Self esteem is found to have negative relationship with A State, in case of both boys and girls. When state anxiety increases, self-esteem decreases and vice-versa. Such school and family programmes are necessitated in which an attempt is to be made to decrease state-anxiety in students so that their self-esteem would increase that would further affect the other aspects of personality to result in well-adjusted persons. Similar is the case with trait anxiety in the whole sample. Obviously, state anxiety and trait anxiety are found to have high significant positive correlation that support many earlier study and that of the authors of the state-trait anxiety Inventory.

The hypothesis of significant relationship among the four variables are accepted for all pairs of correlations except between locus of control and trait anxiety which is not confirmed in the present study.

So far as sex difference in all four variables are concerned, boys and girls significantly differed in state-anxiety and boys were found to possess more state-anxiety than girls. So special care is to be taken by parents, neighbours and school teachers to lessen state anxiety in boys, Regarding locus to control difference in the four-variables, only internal

and external students differed in self-esteem and the former are found to possess higher self-esteem than the latter that demands special care to develop internal perception of personals control in the adolescents on the basis of the results, the hypothesis of significant locus of difference is accepted for self-esteem and is rejected for state anxiety and trait anxiety.

E D U C A T I O N

A MODEL FOR ESTIMATING PUPIL ENROLMENT
AND TEACHER DEMAND

A.D. TEWARI
DEPTT. OF TEACHER
EDUCATION, N.C.E.R.T
NEW DELHI.

A B S T R A C T

This paper presents a theoretical model for estimating pupil enrolment and teacher demand at a particular point of time. Pupil enrolment in a specific class at a particular point of time has been calculated on the basis of total births, survival unto the school going age, school going population success in the class, drop out and rejoining/latejoining of the school. Teacher demand has been estimated on the basis of enrolment, ideal teacher pupil ratio, and attrition rate.

Educational institutions and institutions for professional training are the biggest industries in which human resources are shaped for diversified use in the job market. In industries, the quality of the outputs depends not only on inputs and processes involved but also on sufficient number of specialists dealing with the system. Therefore imbalance between demand and supply of specialists affects to the efficiency of the whole system. The failure of the system may result complete anarchy. It is, therefore, necessary to plan carefully for each and every step in advance.

In the formal education system children are inputs in the hands of teachers - the specialists, who shape them for future life by inculcating certain values, beliefs, ideas and ideologies. Therefore, for smooth functioning of school system sufficient number of teachers are required. Various types of reasoning have been used to estimate manpower requirements such as: demand supply reasoning, trend analysis, extrapolation, regression analysis etc..

Various models have been suggested for estimating teacher manpower requirements. Unesco (1966) has developed an extensive model - "Asian model for Educational Development" in order to predict not only teacher demand, but pupil

contd..

8.3

enrolment, teacher stock, dropouts, stagnation work load on teachers etc. Richards (1972) has predicted teacher demand in the Alberta City using social demand model. Khan (1972) has discussed timberman models for estimating demand of skilled manpower in teaching profession. Sinha, Sharma and Singh (1972) have developed an econometric model for estimating teacher requirement. Das, et al (1982) have developed a model for forecasting teacher manpower requirement of a state.

Besides these, models based on demand supply reasoning are widely used in for forecasting requirements of teachers at a particular point of time.

Certain terms such as demand supply, surplus etc. are frequently being used in the literature, need a bit discussion here. The National Education Association (1979) defines the supply of teachers in any given year as the sum of two pools of individuals. One pool is composed of beginning teachers. These individuals are described as those who meet certification requirements and who are entering active employment as full time teachers for the first time. The other pool is composed of reentering teachers, certified teachers who are returning to active employment as full time teachers after not being so employed during the preceding years.

contd.

Research on teacher supply and demand typically defines demand as the available number of teaching position

The working definition of teacher surplus found in the literature is a simple one. Teacher surplus is simply the number of qualified teachers seeing teaching positions minus the qualified teachers seeking teaching positions available.

The reasoning used in the development of this model for estimation of pupil enrolment and teacher demand is based on the factors identified by ^{a number of} researchers. These are broadly three in number viz.

1. Enrolment.
2. Teacher pupil ratio.
3. Attrition rate.

ENROLMENT:

If N_{it} be considered as the total births in a particular point of time, n_{itd} or n_p as the number of children survived upto the school going age 't' (which is about 5 years in Indian setting), 'a' and 'b' be designated as school goers and school not goers than,

$$n_{itd} = n_{itd}^a + n_{itd}^b \quad \text{--- ①}$$

Provisions should be required to attract n_{itd}^b population to the schools in the year (itd) to

contd.

achieve hundred percent population in schools in the year ($i+d$).

Enrolment in Class I in the year ($i+d$) can be given by the following formula.

$$I_{i+d} = n_{i+d}^a + n_{i+d-1}^e + n_{i+d}^h - n_{i+d}^g \quad \text{--- (2)}$$

Where

- a = School goers
- b = school not goers.
- c = passed the examination/class/grade in which studying and joined next class
- d = passed the examination/Class/Grade in which studying but did not joined any class.
- e = failed in the examination/class/grade in which studying and joined the original class.
- f = left the school/class/grade due to failure in the examination/class/grade in which studying
- g = left the school due to other reasons during the year.
- h = joined the school/class/grade at higher age in lower grades.

Enrolments in class I in the year ($i+d-1$) and in class II in the year ($i+d$) can be calculated using the above notations for the total birth in the

contd..

year ($i - \alpha - 1$)

Similarly enrolment in various classes in the year $i + \alpha$ can be calculated considering total births in the years

($i - \alpha - 1$), ($i - \alpha - 2$), ($i - \alpha - 3$)....., and the above notations.

Total enrolment in any school can be obtained by summing up the enrolments in classes I, II, III..... in the year ($i + \alpha$)

TEACHER PUPIL RATIO:

Proportion of teacher to pupils at any given point of time gives teacher pupil ratio. Best estimate of teacher demand can be once arbitrary value of teacher pupil ratio such as 1:20 or 1:15.

ATTRITION RATE:

This value can be obtained by calculating the proportion of teachers who left the job due to one or the other reasons to the total number of teachers in that year. For estimating attrition rate only those reasons should be considered which cause permanent vacancy. Such reasons may be death, retirement, termination of services, taking up non-teaching jobs etc. Provision should be made for short term vacancies also for effective planning.

Estimation of enrolment and teacher demand.

Using the above equations enrolment can be calculated directly, teacher demand can be obtained by enrolment and teacher pupil ratio and teacher attrition.

Discussion:

In this estimation model though survival rate, base years population is required these can be estimated using extrapolation or trend analysis. It is expected that this will not deviate much from the actual values.

contd.

References:

- Das, R.C. et al (1982) Development of a Model for Forecasting Teacher Manpower Requirement. NCEERT, New Delhi (in press)
- Khan, Q.U.(1972) Concepts and Methodology of Estimation of Manpower Supply. Manpower Journal, 8(3).
- Khan, Q.U.(1973) Manpower Requirement Approach to Educational Planning Indian Education Review, 8.(2)
- Richards, D.M.(1972) Predicting the Demand of Teachers. The Alberta Journal of Educational Research, 18(2)
- Sinha, D.R.
Sharma, K.N. and
Singh, R.P. (1972) Econometric Model For Teachers' Requirement. Indian Education Review, 12(3)
- Unesco, (1966) An Asian Model of Educational Development, perspectives for 1960-1980. Unesco, Paris

A COMPARATIVE STUDY OF TRIBAL LEARNERS OF PROJECT
AND NON PROJECT SCHOOLS WITH REFERENCE TO IMPACT
OF NEED AND RELEVANCE BASED CURRICULUM ON ENROLMENT,
RETENSION AND ATTAINMENT OF LANGUAGE COMPETENCIES

Arun Kumar Somal
Research Scholar,
ZHCES School of Social
Science, J.N.U.,
New Delhi-110062

ABSTRACT

Present study was aimed at to compare enrolment and dropout rate of tribal learners in the project and non-project schools with reference to the impact of need and relevance based curriculum and attainment of language competencies. Data were collected from five project and five non-project schools (Sample size-32) in Ganjam district using three questionnaires. These were: (1) pertaining to information regarding enrolment and dropout (2) socio-cultural survey questionnaire (3) Language competency test. Results show that significant difference exists in the magnitude of enrolment, retension percentage, dropout rate, school environment language competence etc. between the project and non-project schools in a tribal area of Ganjam District.

Education today is under attack. What will happen to education is anybody's guess, but there are definite trends suggesting eventual decline of public education. Rising costs, together with declining public concern for education as knowledge becomes a less scarce commodity may lead to paring down schooling to training in basic schools. The present system of education basically culminated a great discontent among the human beings only because education suffers from the gap between the content and living experiences of its pupils, between the systems of values it preaches and the goals set-up by the society, between its ancient curricula and the modernity of science. To remove such maladies and discontent among millions in the global context, education must be linked to life, must be associated with concrete goals, must establish a close relationship between society and the economy. The neglect or disdain from which some elements of the educational programmes continue to suffer, the deficiencies and turballance of curricula appear to us to be the among the most serious symptoms of disease of which education is both the victim and the causes.

The obsolescence and irrelevance of educational content and methods are only due to the imbalances can be defined largely in quantitative terms - too much of one thing relative to another (e.g. too much educational demand vis-a-vis jobs available). A frustrated educational reformer once equipped that it is harder to move a curriculum than a graveyard. This may or may not be an exaggeration, but in all events it is

clearly the case that during the past ten to twenty years, in the vast majority of schools the content of the curriculum and the method for conveying it to learners has lagged woefully behind the rapidly advancing frontiers of knowledge and the changing nature of real educational needs. The result is that much of what now being taught is obsolete in terms of what today's student will require to live effectively in the last part of the 20th century and well into the 21st. Moreover, in many situations, what is being taught is irrelevant as well, viewed in the cultural, social and economic context of the particular nations and students concerned. With all the diversity, the most severe handicap of the new nations as they emerged from colonial rule was the ignorance of the masses of their populations. To a varying degree all colonial powers had made some significant contribution to education in their dependencies.

Democracy represents the culmination of those striving for human dignity and opportunity for individual personal development which go back to the very beginning of civilization.

In a democratic country like India where there is equality of opportunity for all the get education, and when the rest of the world nations are marching towards a 'Learning Society', we cannot neglect the education of the masses. From ideological point of view, education should centre around masses not the classes. In Indian context

we cannot ignore the tribal people and tribal communities as these constitutes a vast majority of the total population of our country. It has been observed by a member of investigations that the traditional curriculum retards progress and hinders development. Our curriculum basically suffers from the gap between the content and the living experiences of its pupils. It is now universally admitted that education must be related to life, needs and aspiration of the people. For achieving this aim, the school curriculum should be flexible and developed in a decentralised manner keeping in view the local needs and resources. Equalisation of educational opportunities and universalization of elementary education are other demands of our national system. In this context great concern is being expressed regarding the education of the tribal children, who have to face innumerable educational problem. In spite of the vast socio-economic and cultural disparity between the tribal and non-tribal students, the tribal are exposed to the same programme which is meant for the non-tribal or the common people. The investigator selected a problem which aims at assessing the effectiveness of the need and relevanced based curriculum adopted by the project schools and comparing the outcomes of the same with the outcomes of non-project school, The curriculum which has been developed by the United Nations' Children Emergency Fund(UNICEF) and has been implemented in the Project schools via SCERT, Bhubaneswar in collaboration with the NCERT, New Delhi. The projects has been launched in

Orissa as a part of national venture with the objective of presenting a flexible, need oriented and more meaningful curriculum. The investigator intended to see the impact of the new curricula as envisaged by the UNICEF on the enrolment, retention and attainment of language competencies among the tribal learners. Here the investigator intended to compare the project schools with that of a non-project traditional schools. Since language is supposed to be a great barrier in imparting education to the tribal learner, therefore, language competency was taken as an important variable in the study.

STATEMENT OF THE STUDY

" A COMPARATIVE STUDY OF TRIBAL LEARNERS OF PROJECT AND NON PROJECT SCHOOLS WITH REFERENCE TO IMPACT OF NEED AND RELEVANCE BASED CURRICULUM ON ENROLMENT, RETENTION AND ATTAINMENT OF LANGUAGE COMPETENCIES".

OBJECTIVES OF THE STUDY

1. To compare the enrolment of the tribal learners in the project school with that of enrolment in the non-project schools.
2. To compare the rate of dropouts of tribal learners in both project and non-project school.
3. To develop a classroom test to ascertain the language competencies in the light of minimum learning continuum (MLC),

4. To assess the language competencies attained by the tribal learners of both project (UNICEF assisted) and non-project schools and to compare both the scores
5. To find the relationship between the enrolment and retention^u with different sub-items of the school environmental conditions (teachers' co-operation, parents interest and class size).

HYPOTHESES

1. There will be significant differences in the enrolment figure of the project schools and enrolment figure of non-project schools .
2. There will be significant differences on the retention percentage of tribal learners of project schools with that of the non-project school tribal learners.
3. There will be differences in the school environment of the project school and the non-project school.
4. The need and relevance based curriculum as envisaged by the UNICEF will have positive impact in increasing the retention figures of the tribal learners in the project schools in comparison to the retention in non-project schools.
5. There will be significant differences among the tribal project school learners with that of the tribal non-project school, where there is no such implementation of the curriculum.

PLAN AND PROCEDURE

In the present study 'survey method' was adopted for probing the problem. In case of attainment of language competencies the design of state group comparison method was followed, as it follows no pre-test, no experimental effect and only one post-test.

Three Questionnaires were developed by the investigator. First one was designed to get the information regarding the enrolment and dropout rate of tribal learners. Data was collected through this questionnaire from the school authorities. The second Questionnaire is related to the socio-cultural survey of the learners of both the project and non-project schools. It was meant for obtaining some necessary information regarding the family, economic condition, parental education, school environment, learners' interest in education, teachers' opinion etc. These data were gathered from each student by the investigator in collaboration with the teachers, parents/guardians concerned. Thirdly, one language test was given to the learners of both the project and non-project school. The language competency test was constructed by the investigator in collaboration with SCERT.

The investigator collected data from five project and five non-project school situated in Ganjam district, which is a part of the tribal belt of south Orissa. The socio-cultural survey was conducted on 32 subjects each from the project and non-project schools.

STATISTICAL TECHNIQUES APPLIED

For the purpose of interpretation and analysis of the obtained informations/data, the investigator has used certain statistical techniques. Firstly for finding out significant differences between the retention percentage of project and non-project school, the investigator has calculated the standard error of differences between two uncorrelated percentages (SE_{p1-p2}). Secondly for finding out whether there exists any difference among the project and non-project school learners, family environment, school conditions, parental education etc. the investigator has applied X^2 (chi-square) test of independence. Lastly, in order to find out the differences between the scores obtained by two groups on the language competency test, the investigator has applied the t-test and has found out the Mean, SD of Project and non-project school learners language competency scores.

SAMPLE

The present study is confined to five UNICEF assisted project schools and five non-project traditional schools of the Ganjam district, located in the tribal belt of Southern Orissa. Socio-cultural survey was conducted by Questionnaires and the attainment of language competency test were administered on 32 subjects each from the project and non-project schools. Random method of sampling was followed while

selecting thirty two learners each from Project and Non-project schools.

MAJOR FINDINGS

The following are some of the major findings -

1. The investigation shows that there exists a difference in the magnitude of enrolment of the students of Project and non-project schools. It implies that enrolment figures swell in case of Project schools and thin out in case of non-project school.

2. Significant difference exists in the retention percentage of project and non-project school. It has been found by the investigator that there is a high rate of retention in project school learners in comparison with the non-project school learners. In other words it can be concluded that

there is a lower rate of retention in the non-project school

3. It has been found that the dropout rate in the project schools is less, whereas it is more in case of the non-project schools. In other words it can be concluded the occurrence of dropout phenomenon is more frequent in case of the non-project schools and has less frequent in case of project schools.

4. It has been found by the investigator that there exists a difference in the school environment of project and non-project schools.

5. It has been found from the present study that there exists a difference among the learners of project school in

relation to the non-project school learners with reference to the attainment of language competency. The language competencies of the project school learners are far superior than those of the non-project school learners.

6. Present investigation reveals that the parental education of project school learners is slightly better than the parental education of non-project school learners.

7. It has also been found that there is no significant difference among the project school and non-project school learners in relation to the parental occupation.

8. It has been also observed that there is no line of demarcation between the project and non-project school tribal learners in relation to the parental income.

9. Study has revealed that there is no difference among the tribal learners of project and non-project schools in relation to the family environment.

10. It has been studied by the investigator that there exists a difference among the project school and non-project school learners in relation to the first generation and second generation educational levels. Most of the learners of the project school are the second-generation learners and very few are the first generation-learners and the reverse being true in case of non-project school learners.

11. Investigation has revealed that there is a significant difference among the project school learners and non-project

the learners to their parents. Non-project school learners spend more time in their domestic chores as compared to their counterparts.

SUGGESTIONS

1. The Government both in the Centre and the Provincial level should take initiation for promoting the tribal education.
2. State government should carry out different projects in collaboration with some international organization and should carry out the recommendations as suggested by the UNICEF/UNESCO etc.
3. Efforts should be made by the State governments for the upliftment of the poor tribals, there should be some incentive, by the governmental organisations to encourage education among the tribal folk.
4. The sincerity of the Governor, Educators and people concerned is to be tested for the improvement of socio-economic conditions so that the tribal can join the main stream of the national life and play an effective role in bringing a change to their own life and destiny and to the life of the people of the State in general.
5. Some kind or preparatory course(a full course of pre-primary education) should be provided to overcome the linguistic problem and the concept promotion problem caused due to narrow social and cultural environment.

11.1.

EDUCATION: A MEDIA OF
TRANSMITTING VALUES

Nagendra Singh
NFE Group
DPSEE
NCERT
NEW DELHI-110 016.

A B S T R A C T

This paper presents a theoretical basis for
allocating higher values among children through the media
of education. It puts forth the inevitable role of Education
in shaping ideas and ideologies of generations, cultures and
societies. Discussion on the vitality of modern education
system in providing appropriate value system and its
influence on coping with the rapid advancement in present
day society have also been done in brief.

EDUCATION, A MEDIA OF TRANSMITTING VALUES

Education is a term that had been subject of great discussion among philosophers, pedagogists, political thinkers, psychologists and sociologists. Each one of them has emphasised their respective interest in the definition of education. Some have defined education as preparation of life, while others looked out it as a process influencing mental growth. Still others attempted to define education as a learning process. All these definitions have limited the concept of Education.

There seem to be one common element in all these approaches to define education, viz, "an initiation into the pattern of ideas which is valued by a particular society and is handed down within it from generation to generation". (Sten-house, 1971). These thinkers viewed education as a process which imprints values, standards and norms on the mind of an infant who enters the world without knowledge of any sort. During this process of transmitting knowledge the child takes advantage of the knowledge which his ancestors have already won by keep thought, hard experience and bitter mistakes. Each generation makes its own contribution to this tradition and in turn hands on to its own children a richer heritage; and in a sense each new comer enters

11.3.

through education into the collective mind of mankind.

Social Scientists looked at education as the media of the transmission of culture. By culture they meant the ideas shared by a social group whether it be a tribe, a complete nation or a whole civilization. These ideas are preserved, remembered from generation to generation. In this way education serves both society and the individual. It serves society because it keeps its culture alive. It serves the individual because it places that culture at his disposal, so that he may use it to fulfil his needs. Thus society and individual function in complementary positions to each other. Society needs individuals whose abilities and personalities are developed by education, while the individual needs his society's culture in order to develop himself.

Persons has defined three fundamental characteristics of culture as follows: "First, that culture is transmitted, it constitutes a heritage or a social tradition: Secondly, that it is learned, it is not a manifestation of man's genetic constitution and third, that it is shared". Stenhouse believes that person is emphasising that culture, though in one sense a heritage, is one which can only be entered by those who will make the effort to learn, and that this effort will yield them, not some knowledge uniquely possessed by themselves but rather a body of ideas

accepted as the basis of life by their whole society.

Therefore, it is in the sharing of culture that man becomes a fully social, rather than a solitary animal, and the great creative achievements of individual persons can be seen to grow from cultural tradition and are by no means entirely unique.

Thus the life of any society depends upon its culture. To be within a culture is to be able to communicate and cooperate with one's fellowmen, to think within the richness of an intellectual tradition and to take one's place in the economic and social life of society. Human progress depends upon the maintenance of culture.

Defining Values:

Sociologists and anthropologists have given various definition of culture. It is broadly conceived as that part of the society which is non-physical, non-genetic and is more or less permanent. Culture is all man made things in the society. It is also identified as material and non-materials, the non-materials aspect of culture are the ideas, the notions and the values. The concept of values bounded with the notions of good or bad and positive or negative. These are the constations of the concept values which characterize the ethical force of this concept. It is also considered as

11.5

a force which satisfies human desires. Urban (1953) defines values as a characteristics of an object which satisfies human desire. Such objects are termed as 'good'. He further defines value as anything that furthers or conserves life. In this form "value is a vital phenomena appearing in a psychological form". Further analysis of this philosophical construct helps in evolving a more comprehensive definition of value. It is, "that above is ultimately and intrinsically valuable that leads to the development of selves, or to self realization.

According to another approach the concept values refer to interests, likes, preference, duties, moral obligations in addition to desires, wants and needs. It further refers to aversions and attractions and many other modalities of selecting orientations (Pepper, 1953). These conceptions of values are either ethological or ethical in character. The economic worth of an act or object is also implied by the term value. Social scientists define values in their broader perspective. For them values are "conception of the desirable, influencing selective behaviour....." values regulate impulse satisfaction in accord with the whole array of heirarchical enduring goals of the personality, the requirements of both personality and socio-cultural system for order, the need for respecting the interests of others and the group as a whole in social living (Kluckhohn, 1951).

Value is further understood as anything of interest to a humans subject. It may be seen from the foregoing attempt to define values that it is not an easy task to evolve a universally acceptable definition of value. Ottoway, suggests that value includes something of the religion, philosophy and ideology of the people. As it will be seen in the later part of this paper, it is difficult to divorce education from culture, an influential educational system provides a free interaction between technical inventions and socio cultural forces that guide or regulate the behaviour of the members of the society i.e., values. An effective educational system must have clearly defined objectives. These objectives refer to a set of ideals for which knowledge and skill are imparted. The value considerations are so widely pervading the sphere of education that all educational decisions involve or presuppose value decisions. Thus there is a close connection between educational objectives and values. Lowy states that in the light of the nature of experience and of functional relation of values to experience as understood by the biological, psychological and social sciences, moral and spiritual values are indigenous to the relation and functions of the school (Education, itself).

The values are important in regulating and synchronizing the behaviour of an individual with his environment. School has a role to play in the formulation of these values.

Value orientations and social models are important factors in shaping the structure and organisation of the school. Dahike emphasised the need of matching the values being taught in the schools with those of traditional ones. When such a matching between old and the new values is missing then learning is replaced by indoctrination.

Values are of various types they are eternal and temporal, intrinsic and instrumental, lower and higher, individual and social etc. The other classification can be made is that values are bodily economic and recreational. Those connected with the social self are bodily, economic, recreational, as-sociational, character, intellectual, easthetic and religions. (Urban 1956). These values are divided into broader classifications, (a) organic and (b) hyperoreganic. Hyperorganic values are subdivided into two categories namely values of sociality and spiritual values.

The major process through which the culture is transmitted from one generation to another is the process of immitation. The Child learns about his culture from parents, siblings and peers through direct experience of their physical environment and of their place. The content of such an informal learning cannot be transmitted through

11.8.

formal schooling. Since such learning is closely related to their immediate needs, the children's ability to learn and remember is sharpened and encouraged. It may be construed from this that the values, which are the important components of a culture are not transmitted through formal education at all. In societies, other than primitive ones, where education has become a more organised aspect of life, young people not only learn basic skills but also acquire certain social graces and an idea of right and wrong according to their ethical code of their particular society. Children in such a society enjoy not only what may be called a vocational education but also, one which equips them to make the most of the social life of their groups.

According to Stenhouse in advanced societies education has two elements namely, the spread of literacy and controlled direction. It is in the second element that the teaching of values are incorporated in an educational system.

Ever since the Greeks propounded their view of education, the function of education of transmitting values from one generation to another had been given a central importance in the educational system. It was the question of transmitting what types of values through education that was the main cause of Socrates' martyrdom.

There had been a large number of instances where education had been used to indoctrinate the minds of the young people. The attitudes and values which supposedly strengthened the ideology of regimes were taught to children in the schools right from their early age. During such a process individuality of a child is crushed. On the other hand there are equally a large number of instances where education has been used as a media of evolving new values, ideologies and bringing about a cultural revolution in society. Still another view put forth by Plato holds an important place in the theory of education till today; that education should go beyond the mere transmission of ideas from one generation to the next and that by generally bringing the up-bringing of young one could aspire to make possible truly richer and fuller life. Thus Plato saw education as a creative force with which to shape a better society. He laid emphasis on the virtues of wisdom, courage, temperance and justice. Perhaps for him these were the basic values that from a just society, a state and an administration following this approach were found that Plato characterized his educational system with a function to "Discover those whose natural talents offered greatest promise" such people possess wisdom and virtues.

The above discussion rises a few basic questions like, should values be transmitted by education, who should

decide what values to be transmitted and what not?; is it possible to evolve an educational system which does not transmit the values? our further discussion on the topic will mainly be an attempt to present a few views on these questions.

In order to answer our first question i.e., should values be transmitted through education? We shall have to examine the content and objectives of our educational system as indicated above. The content of education is decided upon on the basis of objectives we say for a particular educational system. The true character of education reveals that the transmission of values from one question to another is automatic because of the first of the two elements of education i.e. spread of literacy is achieved with the help of books prescribed for the school and college students. These serve as media of education and social values, attitudes and beliefs are transmitted to the children through the literature they are given to read.

The second question i.e. who should decide what values be transmitted and what not is most crucial one. It is in the attempt to answer this question that educationists and thinkers both in the primitive and advanced societies have been trying to lay down the objectives of their respective educational system. In a civilized and well knitted society

objectives of an educational system have been laid down at different levels. The apex body in the society, devoted to the cause of education, lays down the broad guidelines of the educational system which are simply the extent and the content of a culture to be transmitted from one generation to another. It is at the lower levels that the details of these extents and contents are worked out. These are brought before a teacher in the form of a curricula and the methods of teaching this curricula. Thus the real media of transmitting values are methods of teaching and the curricula. Though educationists may feel that they are dealing with the methods of developing craftsmanship in a citizen, yet behind this whole process, consciously or unconsciously they are working towards the development of his balanced personality. Values being a component of personality can never be left of the educational system.

When we look at the new trends in education which emphasizes need based character of an educational system, we are not diverging from the basic role of education i.e., transmission of culture and its values. It is because the values themselves are a source of need and desires of an individuals as well as of the society. Societal needs are a sort of a universal consensus on what to be transmitted and what not to be transmitted. In this context it would be in the fitness

of things if we study in depth the evolution of education system in India. Broadly speaking, there are four stages of this development, namely, education in Vedic period, education in medieval age, European impact on education system and lastly post independence educational system. A comparative study of these four stages of the development of education in India would diverlage distinct emphasis on values. The most gloomy state of education appeared during the third stage of development of education in India, i.e., European intrusion into educational system. Macanley's intrusion into Indian educationis erroded all the Indian Values embiled in the educational system in such a gradual manner that today we are facing a greatest conflict in the minds of educationists as to what should be taught and what should not be taught. The enriched Indian culture was divorced from the new European educational system. This was an attempt by the Europeans to start this gradual divorce process of the culture heritage of the Indian people and attract them to materialist values of the Europe.

Thus it must be construde from the above that the introduction of European educational system was an implicit attempt to bring about a cultural revolution in India. Europeans succeeded in their attempt and altogether a new

11.3.

outlook, new way of life, qualitatively different aspirations among the people and their motivations developed.

In order to achieve this aim through education the main technology adopted by them was to subordinate the Indian thought, literature, arts and science to the European ones in the curricula developed by them to be taught in schools and colleges in this country. The structure and functions of school and college during this period was significantly different from those existed in India in the form of Pathashalas, Madrasas, Gurukuls and Ashrams. These educational institutions, both of pre and post European impact are organized specifically on the basis of importance attached to a set of human values. During the post Europeans impact are the major values on which these educational institutions were based were compassion, respect of elders, sacrifice for truth, devotion to the teacher and distribution of different stages of life to various causes for the self, for the family, for the nation or society. Unfortunately these values were taken out of the content of educational system introduced by the Europeans. Instead new set of values like obedience to political authority, attaching higher importance to material well being, paying the cost of sacrifice and devotion through monetary returns, indifference towards teachers and ~~scholars~~ and self centeredness took the place of older values.

During the last 25 years attempts are being made to revieve the Indian values in the content of education along with new emerging set of values. The new values that are developing are mainly based on the modern philosophy which is over loaded with materialism, nationalism and humanism. These values have not been fully embided in the present educational system. However much emphasis have been laid on incorporating these values in the educational system laid down by Kothari Commission. It is suggested that the books may be written in such a way that the coming generation internalise them. The process of internationalisation of such values has to be acceralated by the teacher. The educational aids like television, radio, cinemas and the press provide non-formal support to such an internalisation.

Ancient India's scientific achievements are to be reinter^{pre}ted in the modern context so that the youngsters are provided with an educational environment to raise the national esteem and embide the nationalism in them. It is education through which the scientific temper can be developed among the younger generation.

During the last decade or so the question of re-writing and reinterpreting the history of nation has been debated much, but very little is done in this direction. Another

important function of education which has not been fulfilled is that it has failed to develop feeling of national integration among the people. Whatever the other causes of this state of affairs may be, undoubtedly, one of the important cause is the absence of well defined values to be transmitted through education.

To conclude we may say that educational materials, viz, books, journals and films etc. are the main sources that help in transmission of values from one generation to another.

REFERENCES

1. Aitekar, A.S. Education in Ancient India, Banaras, Tara Printing Works, 1964.
2. Bower, W.E. Moral and Spiritual Values in Education.
3. Dahlka, H.O. Values in culture and classroom, New York, Harper & Brothers Publishers, 1958.
4. Nalsey, A.H. The Sociology of Education in Smelser, N.J. Sociology. An Introduction, New York, John Wilsey & Sons, 1973.
5. Hoge, D.R. & Bender, I.E. Factors influencing value change among college graduates in Adult life. J. of Personality and social psychology, 1974 Vol. 29, No. 572-585.
6. Mujeeb, M. Educational traditional values Meerut, Meenakshi Prakashna, 1968.
7. Ruhela, S.P. Traditional values of the Indian Society and college students, New Delhi, N.C.E.R.T. 1968.
8. Shib Edward Centre and periphery in peterwersley (Ed.) Modern sociology: Introductory Readings pengnim books, 1970.
9. Smelser, N;J. (Edit) Sociology: An Introduction New York, John Wilsey and Sons, 1973.
10. Wersley, Peter (Edit) Modern sociology Introductory Readings Pengim Books, 1970.

PROMOTING RESEARCHES IN INTEGRATED EDUCATION
FOR THE DISABLED

K.B.Rath,
DTESE & ES,
NCERT
New Delhi - 110.

Research is inevitable for development. Like other factors it also deserve equal attention. It provides input for development. The circumference of other areas like natural sciences, physical sciences, psychology, education etc. multiplied because of growth in researches, side by side other environmental factors like economic provision, provision of materials, willingness and facilities for implication. Considering other factors we must enlarge the areas of research if we want development in any field. The same is imperatively needed for special education particularly in education of the disabled. Being installed in the quarter of nineteenth century the progress is not up to the mark. It is still in its embryonic stage. If research in education of the disabled is in embryonic stage, research in integrated education for the disabled is yet to be born. It requires a nourishing environment and a true spirit to grow. We researchers should shoulder this responsibility. This article is directed to this end with retrospection which will provide a guidelines for further improvement.

Retrospect:

As mentioned above the early researches in education of the disabled are negligible. The three surveys of research in education compiling educational researches in India from 1939 to 1982 do not have even a dozen of studies in education of the disabled (Buch, 1974, 1979, 1984(inpress)). The survey made by Indian Council of Social Science Research from 1972 to 1976 on researches in psychology also does not contain more (ICSSR, 1981). To explore the reality an attempt is being made by NCERT (Jangir in progress) to collect studies related to education of the disabled. Collected studies (50 in number) have been conducted only in Masters Degree level, expect 3 studies in Ph.D. level.

appropriate answer to this question the followings are discussed.

Areas of Research

In the beginning step it is necessary to identify the priority areas of research. It provides a guideline to researchers about 'Where to start' and 'What to do'. In that connection the following priority areas are suggested.

1. Conceptual Research.

Integration is a new concept in the Indian context. It will be worthwhile to conceptualise integration emerging from the convergent supportive theory from the relevant disciplines. The concept will have to be validated empirically. Its effectiveness is also to be studied through comparing education of the disabled in special setting and integrated setting. But in these types of studies treatment fidelity must be ensured. It will also be worthwhile to examine as to what type of persons with what type of disability are amenable to these two systems so far as education is concerned.

2. Disabled Child.

Lot of empirical research needs to be carried out on Indian disabled children to draw the change of profiles. The developmental norms developed by NCERT (Muralidharan, 1976, Bevli, 1974) can be the starting point where in displacement and deficiencies can be identified. It will be worthwhile to build up profiles of the disabled child, their personal characteristics, cognitive, psychomotor and affective development. Their self-concept, perception, adjustment to others, attention and learning styles may also be studied.

3. Early Intervention and Home Management

These are the unavoidable ingredients of preschool integration. Early intervention programmes are oriented towards the early compensation for disability. If the impairment is identified early and intervention programme started, the disability will be reduced to the minimum on the basis of nature and degree of

impairments. To facilitate intervention programme in formative years, early identification programme is necessary. Early screening programmes are foundation stone of early identification. Though some tests for early screening like DDST, DIAL, ALP are available in abroad, it is rare in India. Efforts should be made for developing screening test. In addition to it procedural studies like reliability of formal detection, developing informal structure in formal detection using parents and village level functionaries, reliability and validity of scales, checklist and guidelines can be conducted. It can be followed by the study of impact of early stimulation in home as well as preschool. In this study effectiveness of low cost aids available in the community, matching of aids with the nature and degree of handicap, procedure of stimulation programme, parent involvement can be explored. In home management studies focus on parent stress and anxiety due to disabled children, their attitude, effect of their socio economic status, educational level on acceptance and negligence towards the child, their aspiration about the child, factors determining their interest in nurturing the child and parent guidance and counselling will provide a least restrictive home environment to the child.

4. Modalities of Integration

There are different modalities of integration. We have to see what is the relative effectiveness in terms of education of the child? With what type of children with what type of level and what type of disability in what social cultural media and in what profile media the models are effective? What is the level of efficiency of the models when cost and pupil outcomes are taken into consideration. Which type of planning for integration will be helpful? Area planning or institutional planning? It will also be worth while to investigate the determinants of the effectiveness of different models of integration. As interdisciplinary coaction the problems lies on the concordance among members of various discipline in decision making can be investigated.

5. Adjustment of Classroom Instruction

Placement of disabled children in regular classroom requires adjustment of instruction to meet his needs. Definitely the adjustment is according to the level of disability of the child placed in the classroom. It will worthwhile to study the perception of regular teacher about the adjustment in the instruction, his competency in adapting instruction in the regular classroom, instructional need of the different group of disabled, organisational support needed, effect of different adjustment pattern and factors facilitating the adjustment of classroom instruction. On the other hand the effect of adjustment of instruction on nondisabled peers' perception and achievement should be explored.

6. Class room Interaction

Disabled students have different variety of experiences in comparison to non disabled students. They may be comparable with their peers on some aspect of experiences, but due to visible impairment acceptance by their new peers in regular classroom is uncertain. The researches in this area can answer such questions as, which group of disabled children are more accepted on the basis of their nature and degree? What is the effect of disabled students value system, teachers initiation on social modeling? What type of reinforcer are effective in contingences of reinforcement? How far Models from social interaction family developed by Weill & Joice (1980) are capable to facilitate interaction among them? What way Applied Behaviour Analysis are applicable to different group of disabled children? Another set of questions like what is the sociometric status of the disabled child and the resource teacher? What is the level of rejection acceptance of disabled child from the socio emotional climate in the institution and the rejection, acceptance patterns of the disabled in to the system.

7. Teaching;

The frame work of research on teaching can be adopted for research in this area as well. The research on teaching has been

conceptualised in to these components. The first component refers to the presage variables which are related to the teachers- his personal characteristics, academic attainments and professional competencies acquired. These also include the formative experiences that the teacher brings with him from out side the ambit of formal academic pursuit and professional training. The second set of variables refers to the context variables. The context variables include pupil characteristics (any group of disabled) cognitive personal characteristics, psychomotor capabilities, nature and degree of disability. The second set of variables refers to the curriculum that is curriculum characteristics, keeping in view the cognitive and sensory deficit arising out of the disability of the disabled. Yet another set of context variables refers organisational climate or socio emotional climate build up in the school. Arising from this climate is the product of of human relations between the head of the institution and teachers and between teachers and teachers. To this may be added the contribution of the human relations between teachers and students, students and students and the disabled children and normal student who are to be placed in the regular schools. The presage and context variables determine the process variables during transaction in the class room. It affects teacher behaviour which of course affects the student behaviour. The teacher and student behaviours during classroom transactions in the process of teaching results in another set of variables known as pupil outcomes which can be immediate outcomes and long term outcomes also. The immediate gains in achievement, attitudes and values are covered under this. Long term outcomes is in terms of a person's adjustment in his subsequent life in the profession and at home as well as in the society. Research is to be carried out for teaching of these children in the classroom in respect of each of these studies and variables. To then we can also add some variables relating to planning and management which will be required for taking decisions in that particular area. These will relate to the service of disabled identification of any group of disabled, assessment of their degree of disability, impact of impairment on various

ability, the preparation for placement, selection of the schools and of course implementation of the programme. In that context the human relation will also go beyond the institutions. The broader frame work of the human relations will provide the discrepancies in the perception of the person involved in the programme and the means to overcome the discrepancies.

8. Teacher Effectiveness:

The dearth of teacher man power in the fields of IED is a bottle neck. Most of the employed teachers are untrained. Effectiveness of this programme is also depend on a competent teacher. These untrained teacher can acquired the competencies through inservice programmes. The researches in this area should focus on the training strategy like effect of microteaching on the competencies of the resource teacher. If any other strategy other than this is effective for teacher training in special education? What are the characteristics of resource teacher responsible for expected role performance? How far teachers are ready to accept a new challenge? These questions can be answerable more effectively by adopting triangular research paradigm derived from Mitzel Model of Structure of Teacher Effectiveness (Donnelly 1981)

In addition to it the above mentioned priority areas some survey on community resources, total number of institution and no of disabled children enrolled, number of teacher training institutes, no of school implemented the IED scheme and category and number of disabled children enrolled in regular school can facilitate the implementation of IED scheme.

Methods and Type of T Research

The predominant research methodology in the special education in general and integrated education in particular is quantitative research. It emphasises searching for the fact and causes of human behaviour through objective, observable and quantifiable data. Instead of its wide use it has been criticized for being primarily confirmatory or verification oriented,

particularistic and ill suited for addressing the social or educational relevance of research efforts. (Lo-Compt & Goetz, 1982 and Smith, 1983). To broaden the research perspective in special education qualitative research has been proposed (Stainback & Stainback, 1984). The same can be applied in case of integrated education for the disabled. It is based on a theoretical position referred to as phenomenology. Phenomenologists seek to understand people's perceptions of events in their environment. In order to gain an understanding of the perceptions, qualitative researchers study a variety of documents, talk with people, and observe how they behave in relation to events in their environment. They collect and analyze data from a variety of sources to produce some logical or as Campbell (1979) described it, 'commonsense' perspective.

A survey of researches in education and special education shows scanty quantitative researches, no question arise for qualitative one. If the researcher will start the will qualitative research in the beginning which /help in developing theory in special education, that can be subjected to verification through quantitative researches. So far as research design is concerned single-subject research design is more appropriate for disabled students to study the behavioural changes. If the group studies operated the available design employed in our educational research may transfer to special education as well as the integrated education for the disabled.

References

13.8(a)

Bevli, U.K., Language Development of Indian Children, Developmental Norms of Indian Children, NCERT, 1974.

Buch, M.B. A Survey of Research in Education, CASE, Borada, 1974.

Second Survey of Research in Education, Society for Educational Research and Development, Borada, 1979.

Campbell, D. 'Degrees of freedom' and the case study. Cooked Reichardt (Edn.) Qualitative and Quantitative methods in evaluation research, Beverly Hills Co, Sage P publication, 1979.

ICSSR, Survey of Researches in Psychology, Indian Council for Social Science Research, New Delhi, 1981.

Jangira, N.K. Research and Development for Integrated Education for the Disabled, Paper presented at National Seminar on Integrated Education for Hearing Impaired Children, NCERT, 1984.

LeCompte, M. & Gootz, J. Problems of Reliability and Validity in Ethnographic Research, Review of Educational Research, 52. 1982.

Muralidharan, R, Adaptive Development of Indian Children, Developmental Norms of Indian Children. NCERT, 1976.

Smith, J. Quantitative versus Qualitative Research, : An attempt to clarify the issues, Educational Researcher, 12, 1983

Stainback, S. & Stainback, W. Broadening Research Perspectives in Special Education, Exceptional Children, Vol-50, No, 5, 1984..

Wool, M. & Joice, B.R. Models of Teaching. Prentice Hall Inc, Englewood Cliff, NJ. 1980

MODEL BASED TEACHING AS A STRATEGY FOR
IMPROVING TEACHING EFFECTIVENESS

Mrs. R. Rath.
M.Ed. Student,
Jamia Millia Islamia,
New Delhi.

ABSTRACT

This paper presents a brief and precise account of systematic efforts needed in Research in Teaching for developing Teaching theories. Teaching skills approach and teaching model approach are assumed to be more promising in developing teaching theories. The author is of opinion that four families of teaching models emerged as a result of systematic research can give some ground to develop teaching competence among prospective teachers.

The first and foremost aim of our education is to sharpen the higher mental processes of the pupils in order to help them in their better adjustments in the Changing World. Teacher plays a pivotal role in this educative process. Teaching enables the teacher to achieve above objectives. It is an activity on the part of one person intended to facilitate learning on the part of another. (Gage 1979). This activity can be conceived as the ternary relation i.e. x teaches y to z . Expressed in the notation of relation theory, this becomes $T(x,y,z)$. In this notation the domain of ' x ' is the set of persons who act as teachers, the domain of ' y ' is a set of knowledge, beliefs or skills selected by a teacher and the domain of ' z ' is a set of individuals who are taught by a teacher. All these domains contained so many variables which are classified into 4 classes i.e. pressage; context; process and product. (Dunk-in and Biddle 1974). The components of product variables emerged from process or interaction of other variables provide an idea about effective teaching. Hence, the concept of effective teaching is derived from the positive interaction of $(x \times y \times z)$. Teacher effectiveness, which is an out come of effective teaching, imposes a number question like - who is an effective teacher? How teaching will be effective? What teaching strategy to be employed? etc. To provide suitable information incessant research efforts have been made on teacher effectiveness. But these early research efforts

became failure due to (a) failure to observe teaching activities (b) theoretical impoverishment (c) use of inadequate criteria of effectiveness and (d) lack of concern for contextual effects. Further the trends of research emphasize teaching on the assumption that it is more likely to produce useful knowledge than research on teacher effectiveness. The present researches on teaching focus on its processes which will provide valid information for teacher effectiveness. These processes of teaching have different approaches which is revealed by a survey of teaching methodology over the years. In the earlier phases of the developmental history of teaching, gestalt view was prevalent that enshrined the Teaching Method Approach. In due course some common characteristics or behaviours were integrated in to groups called as typology of teaching styles. Further with the development of science and technology, accompanied by its impact on various facets of human activities, Teaching Skills Approach emerged. Too much of atomization in teaching skill approach resulted in dissatisfaction among the educational practioners as well as theorists who felt that the teacher has been conceived as merely a machine at the expenses of his potentiality for creative teaching. As a result, an intermediate alternative in the form of Teaching Model Approach came into existence. It will not be out of place to consider these approaches little more in detail.

Teaching Method Approach:

Teaching method refers to the formal structure of the sequence of acts commonly devoted to instruction. The term involves both strategy and practices of teaching. It covers the choice of what is to be taught at a given point of time, the means by which it is to be taught, and the order in which it is to be taught. Gage (1963) defines teaching methods as 'recurring instructional process; applicable to various subject matters, and usable by more than one teacher'. They are recurrent in that the activities are repeated over intervals measured in minutes or weeks. They are instructional process, such as patterned teacher behaviour (as Lecturing, discussion, recitation).

The teaching method approach views the teaching situation as a whole covering the educational objectives and principles of teaching followed by evaluation. The effectiveness of the teaching method approaches lies in its emphasis upon the total view it provides to the teacher. A teaching method realises educational objectives but at the same time it may not focus on specific smaller units of instructional objectives. The approach in this case is synthetic and not analytic so far as teaching process is concerned.

It becomes very difficult to train teachers in particular methods because of several reasons. The method is a complex of a number of teaching skills and behaviours. The teacher is required to master the method as a whole rather

than its components. This makes it difficult for teachers both pre-service and in-service to acquire proficiency in mastering the method.

Typology of Teaching Styles:

In teaching method we will find that the sequence of teacher behaviour are not random. It is ordered in the direction of helping a student grasp the subject matter properly. These sequence of teacher behaviours have some common characteristics. The common characteristics are clustered into groups which are called teaching styles. These groupings are often denoted as 'types'. 'Types is defined as 'categories of persons such that every person in the category is more like every other person in the category than he is like any other person in any other category'. Maquitty (1967).

Teaching styles are less generalized than teaching methods. These are developed through empirical data from both formal and informal teachers, the objectives of whom differ. So which teaching styles should be adopted by a particular teacher for effective teaching is questionable? It is supported by the findings of Wallen and Travers (1963). Their findings emphasize that changes in pupils remains largely unaffected by style of teaching. It also does not ascertain what factors influence teachers in their decision to adopt a particular style or approach. This poses a problem for the teachers to select appropriate teaching style for teaching.

Teaching Skill Approach:

Other area of studies with instructional process involving teacher and student behaviour during classroom transaction were studied in relation to student outcome. These studies analysed teaching in terms of teacher behaviours. The process of analysing teacher behaviour was reinforced by promising findings in reviews during sixty's and seventy's (Gage 1963, Biddle 1974, Flander 1969, Rosenshine 1972). Some effective teacher behaviours were identified and it was considered that teaching should be analysed in terms of teacher behaviours, and that effective teacher behaviours should be developed through programme of preservice and inservice training. During the course of time interrelated teacher behaviours were organized into what has been described as teaching skills. Teaching skill can be defined as a set of interrelated teacher behaviours under the control of teacher for the purpose of realization of specific instructional objective(s) (Jangira, 1982). Besides teacher effectiveness research, this analytic approach to teaching also has its roots in programmed instruction and behaviour modification approaches. The teaching skills or competency identified common to subjects and grades are known as core teaching skills or general teaching competence. These include questioning, explaining, varying the stimulus, reinforcing etc.

The strong point about the skill approach to teaching is that it makes easier for the teacher to understand skills of teaching in concrete form. Secondly the training of teachers is facilitated, because a teacher instead of starting with practising a teaching method as a whole, can acquire the teaching skills one by one, as in the case of microteaching (Jangira 1982). The weakness of this approach, as is being voiced in the educational circle, is that it leads to too much of fragmentation of teaching. The teacher does not get an integrated view of teaching. Hence, they fail to synthesize the skill into the teaching styles of their own.

Teaching Model Approach:

The preceding sections have described the two extremes on the synthetic analytic continuum of teaching. The methods approach is generalized, and teaching styles are less generalized so far as objectives are concerned while skill based approach is atomized in terms of teacher behaviour and goals to be realized. It has also been shown that all the approaches have strength and the weakness. On this continuum another approach is located which is neither too generalized or too atomized. This approach is known as teaching model approach. A model of teaching comprises guidelines for designing educational activities and the environment. They are prescriptive teaching strategies to realise specific instructional goals. Prescriptive in the sense that teacher's

responsibility during the planning, implementing and evaluating stages are already defined (Eggen, 1979). These models are directed towards the realization of specific goals. Over a period of time a number of models have emerged from researches on learning, instruction, counselling and developmental psychology. About forty models have been identified by Joice. These models have been classified into four families namely Information Processing Model, Social Interaction Model, Personal Model and Behaviour Modification Model (Weil & Joice, 1978, 1980). A brief descriptions of the models are as follows.

Information Processing Family:

This family of models emphasises the information processing capability of the student. They are more relevant in the context of academic achievement which is the major responsibility of teachers in our schools. Information processing is defined 'as the ways in which people handle stimuli from the environment, organise data, sense problems, generate concepts and solution to problems, organise data, and employ verbal and non-verbal symbols' (Weil & Joyce, 1978). Models in this family are directed towards the dealing with cognitive skills. The representative models of this family are Concept Attainment Model, Advance Organizer Model, Inquiry Training Model etc.

Social Interaction Models:

These models emphasize the relationships of the individuals to society or other persons. They are more appropriate for the social development of pupil and enhance the adjustive process in the society which is also a responsibility of teachers in our schools. These models focus on the process by which reality is socially negotiated with respect of goals. The representative models of this family are Role Playing Model, Juris Prudential Model, Simulation Models etc.

Personal Models:

These models emphasize the development of self and the process by which individuals construct and organise their unique reality. They focus on emotional life of the individual and help the individual to develop a productive relationship with their environment. In school climate another varying role of the teacher is to nurture the emotional growth of the pupil which can be achieved through these models. The representative models of this family are Synectics Models, Non Directive Models etc.

Behaviour Modification Models:

These models develop efficient systems for sequencing learning tasks and shaping behaviour by manipulating reinforcement. They emphasise in changing the visible behaviour of the learner rather than underlying psychological structure and the unobservable behaviour. These models

function as a remedy for the mal-adjusted pupil in the school. Modification of their behaviour, which is also a responsibility of the teacher, is emphasised by these models. The representative models of this family are contingency Management Model, Stress Reduction Model, Desensitisation Model etc.

The families for classification of the teaching models have been based on the major areas of the objective that we purport to realise. The emphasis rests on areas such as personal growth, social development and national and world citizenship. These models operationalise the professional roles of the teacher for discharging these multiple responsibilities.

Why Model Teaching Will be Effective ?

The responsibility of the teacher, as all of us know, is to help in learning through the systematically organised activity termed teaching. The learning can be categorized into three domains, namely cognitive, affective and psychomotor and so are the objectives of teaching. For realising the objectives of teaching the teacher uses a variety of teaching strategies. These teaching strategies should be specific objective oriented which is provided by teaching models; When the teacher adopt teaching strategy matching with his objective optimum effectiveness will be attained.

These models acquaint the teachers with some information like how to understand the model, what should be the teacher's behaviour, how the interaction between student and teacher will

be facilitated, and how the teacher can take the help of other sources to increase effectiveness in teaching. Besides this the teaching models are not bounded by the number of students in the classroom. They can be applied to individuals and groups simultaneously.

It is believed by many that the quality of teaching improves with the increasing mastery over a variety of models of teaching and also the ability to use them effectively (Weil and Joice 1980). But at the same time, one can argue that attainment of mastery over all models of teaching is a difficult task. If one model is mastered and applied effectively, it can not achieve other objectives. To achieve different objectives the teacher should master some models from each family.

Assessment of Model Based Teaching Competencies:

For effectiveness of teaching based on models approach, the teacher requires specific competencies for example, they should have a clear perception of the teaching goals. They must have the competencies to identify and select models appropriate to their objectives. Further teachers should have the competencies to implement; to evaluate the effectiveness of this model(s), in terms of designated teaching goals. These competencies should be identified through researches and tools to assess these competencies should be developed.

FACTORIAL STRUCTURE OF TEACHING BEHAVIOUR

Prabhakar Singh
Department of Teacher Education,
Special Education and Extension
Services, NCERT, New Delhi.

A B S T R A C T

The Study has been conducted to study the factorial structure of teacher's classroom behaviour. A sample of 180 secondary school teachers were randomly selected from 24 secondary schools of Varanasi region. The tool 'Teaching Behaviour Schedule' consisting of 42 items on 42 teaching behaviours administered on the subjects. Data thus obtained were factor analysed using principal component method of factor extraction and a principal varimax solution. Results show that eight factors viz- Skill of questioning, explaining, black board writing, reinforcing, introducing the lesson, summarizing the lesson, using teaching aids and illustrating with examples which explained overall 78.70 per cent of variance are the constituent of teaching behaviour of a teacher.

14.2.

The strength of any educational system largely depends upon the quality of teachers who sustain it. Obviously effective teachers are not born, they are trained. Some Indian educationists like Saiyaidain(1962), Kirpal(1968), Shrimali (1968) have repeatedly stressed the need that teacher education should be improved in order to provide good education to the younger generations. The teacher education programme attempts, or is presumed to attempt to meet the challenge with few assumptions. In the first place it is presumed that there is an adequate concept of teaching. Secondly it is assumed that this concept of teaching can be operationalized in terms of teaching behaviours patterns invariably related to the desired educational outcomes. Thirdly, it is assumed that there are certain training techniques available through which requisite teaching behaviours patterns can be developed in a prospective teachers to affect the desired educational outcomes. Lastly it is assumed that once the teaching behaviour patterns are developed in the teacher, they are sustained and carried over to his assigned teaching position in the profession.

The practical training is carried out at present under two nomenclature, i.e. practiced teaching and internship in teaching. Microteaching is one of the most important recent innovations in teacher education programmes which aims to modify teacher's behaviours according to the specified objectives. Microteaching is a specific teacher training technique

14.3.

through which the teacher trainee practices are teaching skill at a time in a small class with the help of feedback to improve the skill. Teaching is practised in terms of definable, observable, measurable and controllable Teaching skills, is the most important point in Microteaching (Passi, 1976).

A Teaching skill is a small set of teacher behaviour which together achieve a specific teaching act. Based on the research on teacher effectiveness, analysis, emerging psychology of learning and instruction, several sets of teaching skills have been identified by different institutions and individied workers. Allen and Ryams(1969) have listed fourteen teaching skills at Stanford University. Eighteen teaching skills have been listed at Forwest Laboratory, California by Borg et al(1970)(Passi(1976) has given a list of thirteen teaching skills. Based mostly on the list of teaching skills developed at stanford university and the Forwest Laboratory and list of teaching skills developed at CASE(Lalith, 1975), Passi has conceptualized twentyone teaching skills, which are essential for general teaching competence. Turney(1977)

has listed seventeen teaching skills. Jangira, Singh and Mattoo(1979) modified the work and arrived at twenty teaching skills while working with theacers educators, students teachers and inservice secondary teachers. A number of these skills are common with different terminology and minor differences in teaching behaviours comprising the skill. The listing of teaching skills raises some issues. Which one of the available lists is to be accepted and why? Are these lists exhaustive? In this connection Buch(1974) has suggested that serious concerted attempts are needed in research on teaching skills. Das(1981) and Passictal(1981) have also emphasized the need of identifying teaching competencies for a particular subject at a particular level.

Factor analysis is a branch of statistical science which especially provides mathematical models for the explanation of psychological theories of human behaviour. Factor analysis may identify the primary abilities that constitute the larger, general teaching abilities and build a factorial model of teaching. Teaching a human ability and an ability is a trait which is defined by what an individual can do. In fact teaching is consisted of a set of teaching skills and a teaching skill consists of various interrelated teaching behaviours. By applying factor analytic technique the factors/skills and components of a particular skill may be analysed.

The Present Approach : The present study was conducted to study the factional nature of teacher's classroom behaviour exhibited for the purpose of the promotion of students learning. It is attempted here to find out the factors/skills and their component teaching behaviours.

The Sample:

A sample of one hundred and eighty secondary school teachers were selected randomly from 24 secondary schools of Varanasi Region. Out of 180 teachers the number of science socialsciences and language teachers were equal i.e. 60. The number of male teachers was 90 equal to the number of female teachers. The number of urban school teachers was equal to the number of rural school teacher i.e. 90

The Instrument:

For the qualitative measurement of teacher's classroom behaviour a rating scale developed by the investigator himself was used, named as 'Teaching Behaviour observation Schedule. This observation schedule consists of 42 items in the form of teaching behaviours. For all the items a five point rating scale is given on which each occurrence of items i.e. teaching behaviours were rated by putting tallies against the relevant rating points. The point (1) indicates 'very low point (2) 'Low', Point (3) Average, Point (4) High and Point (5) very high effective teaching behaviours. The coefficient of interobserver agreement and coefficient of stability were 0.906 and 0.826 respectively.

The content validity was established by giving it to the experts of the field and it is satisfactory. Its concurrent validity with Baroda General Teaching Competence Scale is 0.935.

Results and Discussions.

The Intercorrelations among all the 42 teaching behaviours(Process variables) were computed by the method of Pearson- Product Moment correlation. The intercorrelations among all the variables of a study constitute the basic data for factor analysis(Herman, 1960 p.12). The principal component analysis as reported by Cooley and Lahones(1962) and Mulaik(1972) was employed for factor analysing the correlation matrix(42x42). Factors with more than 2.5. percent of variance were extracted. The varimax factor matrix was considered useful for the variables underlying the factors because rotation according to Harman (1967), transforms 'arbitrary' factor matrix into the meaningful factor matrix. Thus the rotation was done by the method proposed by Kaiser(1965) which specifies an orthogonol transformation. The highest value of the factor loadings of the teaching behaviours(process variables) were considered significant to attach them with the factors.

It was found that the teaching behaviour of secondary school teachers is composed of 8 factors. Accounting for 78.7 percent of total variance. The structure of the extracted factors are presented below:

Varimax Factor:

This factor accounts for 41.4 percent of total variance and is composed of 8 teaching behaviours. These teaching behaviours with their respective factor loadings are: using concise and specific questions(0.856), using proper and adequate pause while questioning(0.855), Putting questions relevant to teaching points(0.850), putting prompting questions (0.812), putting question for redirection(0.807), putting divergent questions(0.769), using questions to increase critical awareness(0.654) and putting convergent question (0.6039).

All the teaching behaviours of this factor are directly related to the activity of classroom questioning and are considered in the nomenclature. This factor may be named as the skill of questioning.

Varimax Factor-2 This factor is characterized by highest loadings of seven teaching behaviours and shares 8.9 percent of total variance. These teaching behaviours with their respective factor loadings are: Using adequate explaining links (0.815), using planned repetition(0.807), using relevant statements for explanation(0.805) using deliberate silence in explanation(0.784), presenting subject matter clearly(0.785), clarifying pupils, ideas(0.769) and encouraging pupil. Pupil interaction(0.640)

14.8.

All the teaching behaviours of varimax factor-2 are related to the act of explanation of the subject matter. Therefore the second factor may easily be termed as "skill of Explaining".

Varimax Factor-3: The varimax factor-3 accounts for 8.5 percent of total variance. The five teaching behaviours composing this factor with their respective factor loadings are: Presenting main points on the blackboard (0.939), Using blackboard relevant to the lesson (0.934), Black board writing visible to all students (0.933), Blackboard writing clear and distinct (0.927) writing pupils answers on the blackboard (0.911).

All these teaching behaviours have highest factor loadings on the varimax factor-3 and help the teacher to write on the black board during classroom teaching discourse. Therefore, the factor has been called as the skill of Blackboard writing.

Varimax Factor-4 This factor is composed of seven teaching behaviours and accounts for 6.6 percent of total variance. These seven teaching behaviours with their respective factor loadings are: Using verbal eving and prompts (0.827), Reinforcing the desirable attending behaviour (0.787), Using non-verbal ovig (0.765), Using positive verbal reinforcers (0.723), Attending individual pupils difficulties (0.625), Guiding students to find out new concepts/rule (0.548), and using gestures meaningfully (0.497).

Out of seven teaching behaviours of the varimax factor 84 only four are related to the act of reinforcing or motivating the students. These teaching behaviours are: Using verbal aving and prompts, Reinforcing the desirable attending behaviours, Using nonverbal eving and Using positive verbal reinforcers. These teaching behaviours are considered in giving the name to the factor because these teaching behaviours have higher factor loadings than the remaining three teaching behaviours. This may safely be known as the 'Skill of Reinforcement'

Varimax Factor-5: The varimax factor 5 is composed of six teaching behaviours Using previous knowledge of students introduction(0.857), Using relevant statementsp questions in un trodution(0.845), presenting introductory informations in a developmental sequence(0.839), Eliciting pupils' responses through introductory questions (0.837), Drawing students', attention(0.653) and establishing rapport with students(0.631).

Out of 6 teaching behaviours of this factor first four are related to the act of introducing a lesson and have comparatively higher factor loadings than the remaining two teaching behaviours. Hence only these four teaching behaviours were considered in naming the factor. This factor may be termed as the 'skill of Introductory of a lesson'

Varimax -Factor-6 Four teaching behaviours: providing opportunities for pupils to apply what they have learnt to new situation(0.350), Recapitulating the main points(0.304), Maintaining the classroom discipline(0.433) and Responding pupils' questions satisfactorily(0.428). This factor accounts for 3 percent of total variance.

Out of four teaching behaviours of the factor 4 only first two are related to the act of summarizing the lesson and have higher factor loadings than the remaining two teaching behaviours. Hence only these two teaching behaviours are considered in giving the name to the factor and thus the factor may be called as the 'skill' of summarizing the lesson.

Varimax Factor-7 This factor is characterized by the highest factor loadings of two teaching behaviours using relevant audiovisual aids(0.675) and Using audiovisual aids suited to the students understanding level(0.663) and accounts for 2.6 percent of total variance.

Both the teaching behaviours of ~~varimax~~ factor-7 are related to the act of using teaching aids and are considered in the nomenclature of the factor may be termed as the skill of Using Teaching Aids'

Varimax factor-8 : The varimax factor-8 accounts for 2.5 percent of total variance and is composed of three teaching behaviours. Asking pupils to give examples(0.714), Presenting examples clearly(0.599) and prescribing examples relevant to the topic/rule(0.535)

14.11.

All the three teaching behaviours of the varimax factor 8 are related to the activity of illustrating with examples. Hence all the three teaching behaviours were considered in the nomenclature of the factor. Thus the factor may be called as the skill of Illustrating with examples.

Conclusion:

On the basis of the findings of the present study it is concluded that the 'Teaching Behaviour' of secondary school teachers is composed of 8 teaching skills. These teaching skills are:-

- (i) Skill of Questioning
- (ii) Skill of Explaining
- (iii) Skill of ~~Illustrating~~ ^{Summarizing}
- (iv) Skill of Blackboard Writing
- (v) Skill of Reinforcement
- (vi) Skill of Summarizing the Lesson.
- (vii) Skill of Introducing the Lesson.
- (viii) Skill of Using Teaching Aids.
- (ix) Skill of Illustrating with Examples.

References

- Allen, D.W(Ed) Microteaching: A Description. Stanford University, 1966.
- Biddle, B.J E; Methods and concepts in classroom Research Review of Educational Research, 37,337, 1967.
- Das, R.C. Etal, Effectiveness of Microteaching in training of teachers(Mimeo) NCERT, 1976
- Erickson, H.E. "A Factorial study of Teaching Ability" Journal of Experimental Education, Vol.23, 1954
- Fructcher, B, Introduction to Factor Analysis, N.Y. Von Nonstrand, 1954
- Gage, N. L(Ed), Handbook of Research in Teaching, Rand Mc Nally and company, Chicago, 1963. Chicago
- Harman, H.H., Modern Factor Analysis, the University of Chicago Press, 1960.
- Hellfritsch, A.6, A Factor Analysis of Teaching Ability, Journal of Experimental Education, Vol.14, 1945
- Ladake, C.V. "The Measurement of Teaching Ability, Journal of Experimental Education, Vol.14, 1945
- Ryans, D.G. and Wandt, R. A Factor Analysis of observed Teacher Behaviours in the Secondary Schools:
- A Study of Criterion Data: Educational and Psychological Measurement; 12,574, 1952.
- Schinid, J.(Jr) Factor Analysis of Teaching Complex, Journal of Experimental Education, Vol.30-1961.
- Singh L.C. Microteaching; An Innovation in Teacher Education (Mimeo), NCERT, 1977

PROBLEMS OF DROPOUT AMONG THE TRIBAL CHILDREN
IN PRIMARY SCHOOLS: AN EXPLANATORY STUDY

P.K. TRIPATHY
RESEARCH SCHOLAR
J.N.U., NEW DELHI

A B S T R A C T

Fifty dropout Tribal (Santal) Children, Forty-six head of the households and ~~four~~teen teachers of the dropout children have been administered three separate interview schedules in order to identify the factors related to the problem of dropout among the tribal (Santal) Children at primary stage. The findings reveal that due to lack of proper social environment, psychological support and school setting, the tribal children are forced to withdraw from the Primary schools.

I N T R O D U C T I O N

Control of dropout and education of the scheduled tribes are given priority under the educational system in the Sixth Five Year Plan. Art.46 of the Constitution of India lays down that "The States shall promote with special care the educational and economic interests of the weaker sections of the people, and in particularly of the Scheduled Castes and Scheduled Tribes and shall protect them from social injustice and all forms of exploitations". To fulfil this directive, efforts are being made on a continued basis by the Central and State Governments. A substantial percentage of money, resources and time have been allocated to achieve this objective but the results are not upto the expectations. The last thrity six years have been marked by appointment of various commissions and committees and the institution of new programmes and projects in the field of tribal education. Reports such as, Backwar Classes Commission (1956), the Scheduled areas and Scheduled tribe Commission (1962), Srivastav and his associates (1967,1971), Renuka Roy Committee (1960), Elwin Committee (1963), Sachidananda (1967,1972), Ambasht (1976), Dasgupta (1963), Rathnaiah (1977), Singh (1976,1978), Sinha (1976,1977,1980) and many others deal with the tribal community in India as a whole in a glabal perspective. Efforts have been at macro-level

contd..

to determine the status of education among different tribes and at the micro-level to describe the conditions of life within anthropological and sociological frame works. A sizeable amount of research such as Sharma (1976), Das and Paivato (1976), Broota (1979), Mishra and Tripathy(1980), Puspa (1981), Prasad (1971,1972), Mochar (1964), Mukherjee (1960), Sinha (1979), Singh and Sinha (1983) focussing on deprived, dropout and family setting of the Santal/Non-Santal tribes agree that poverty of the tribals is at the root of slow progress in education. Lack of suitable teachers, syllabus and timings of the school are found responsible for dropout of the students from schools. Studies have not focussed on the social environment and Psychological support which may form hindrances to the schooling of the tribal children. Many of the questions yet to be adequately answered.

1. How far social barriers and prejudices prevalent with tribal(Santal) societies act as retarding agencies for education of their children.?
2. How far the psychological supports play an important role for the schooling of the tribal children?
3. Are the tribals(Santals) prepared for education given the opportunities by foregoing economic advantages?
4. What type of school setting factors responsible for

contd..

creating low motivation among the tribal children?

In the present study efforts have been made to identify the social, psychological and school setting factors related to dropout among Santal Children in Murbhanja District of Orissa.

O B J E C T I V E S :

1. To identify Santal Children who have dropped out of the primary school and locate their families and teachers.
2. To analyse the relevant components of social environment of the families of the dropout children.
3. To identify relevant psychological factors.
4. To measure the level of intelligence of the dropout children.
5. To suggest some possible measures in helping those children.

METHOD OF STUDY.

SAMPLE: The study was confined to fifty dropout Santal Children from Primary Schools, Forty-six head of the households from which these children come and fourteen teachers of the dropout children from Maurbhanj District of Orissa. The purposive

contd...

method was used for identification and selection of sample.

TOOLS :

- a) Interview schedules:- Three separate schedules were developed, one each for dropout children; family head and teachers.
- b) Coloured Progressive Matrices developed by Raven
- c) Detailed observation was made and recorded to develop representable cases and profiles of family, school and dropout children.

PROCEDURE:

Data were collected in three phases each extending over a period of about three months. Phase I involved identifying fifty dropout children from the Primary Schools using school records. Phase II involved interviewing all the heads of the families, dropout children and the selected teachers of the Primary schools using specified schedules. Phase III involved the measurement of intelligence of dropout children by individually administering CPM.

METHOD OF ANALYSIS:

The analysis of the responses has been done in terms of percentages obtained separately for children, their parents and teachers.

contd..

MAJOR FINDINGSSocial Environment:

1. The family structure of the dropout Santal Children is very much traditional. The children are under tight control of the heads. Their activities are to be decided by the parental wishes and choices. The school going children are also forced into economic activities at a very early age to support the parental income. This makes them leave schools. Families are closely knit and emotional ties are strong.
2. Dropout children belong to typical santal families where heads are engaged as daily wage earners like stone cutter, wood cutter and agricultural workers etc. The families have income ranging from Rs. 200.00 to Rs. 500.00 per month.
3. Most santal parents are illiterate and therefore, they do not see the purpose of giving education to their children. Other members of the dropout families are illiterate.
4. The santal families are in the habit of taking alcoholic beverages. Most of the dropout children are also in touch of handia occasionally or during festivals.
5. Santals religion is Sama. They perform all religious activities as per the Sama religion. They have strong faith in G-1. They are not contaminated by others religions.

contd..

6. Most of the heads of the dropout children have no village status. Even those have status, they have no special interest to send their children to schools. A majority of the heads of the dropout children prefer rural life instead of urban life. They are not in favour of change and mobility as this may contain in a tribal life

PSYCHOLOGICAL SUPPORT

1. For Santal family there is lack of psychological support in existing social environment. The social environment does not create the favourable attitude of heads and dropout children towards study. All the heads including dropout children have a kind of negative attitude towards educated tribals. Most of the heads are not interested to attend any function in the schools.
2. All the heads are quite ignorant about the purpose of education of their children. They do not aspire upto which class their children are to be educated. Parents are illiterate and having very low aspiration level about their childrens schooling.
3. The mean intelligence score of the dropout children is 15.36. So the level of intelligence is very low as compared to normal children.
4. It is found that the present educational standing with
contd..

regard to reading and writing skill is very poor in case of dropout children. Even the students reading in class II, III and IV were not able to read small words written in bold letters.

SCHOOL SETTING:

1. In all the schools, the medium of instruction is Oriya. The mother tongue of the dropout children is Santali. Due to language difficulty all the dropout children have a kind of negative attitude towards books written in Oriya language.
2. Majority of teachers working in the Santal area are either middle passed or below matric. They do not have special training for teaching tribal children. All of them are quite unaware of the Santal dialect special needs of tribes and difficulties. All the teachers of the dropout children are non-tribals.
3. The syllabus is not suitable for the Santal Children as it is written in Oriya language. All the dropout Children prefer morning hours (6 AM - 9 AM) for their study at the school. All the schools in Santal area start from 10.00 A.M. to 4.00 P.M. During the school time most of the children are engaged in different types of economic activities.

IMPLICATION AND SUGGESTIONS:

Implication: In the Santal families, Socio-

contd.

psychological factors play an important role towards the dropout of the children from primary schools. The social environment does not seem to place value on schooling of their children. The negative psychological pressure from the existing social environment does not encourage the students to continue their studies. Lack of suitable teacher and difficulties in language create no motivation among the Santal children to come to the schools. So, dropout in Santal tribals share with other disadvantages in the social conditions and psychological support of the individuals. They have no special problems as tribals except of language, psychological deprivation on the basis of language and regular drinking habits. Altitudes seem to be comparable to poor and deprived but they are more closed. There is also no understanding among teachers, family members and children to appreciate each others problem and look at school as a positive agency. The findings of this study have revealed several significant problems, however, because of the selection and size of this sample, extreme caution must be exercised in attempting to generalise these findings. It is therefore necessary that replication studies within different types of tribal families across various educational levels may be conducted.

contd...

SUGGESTIONS:1. To eradicate social superstitions and Prejudices.

- a) Adult education Programmes for tribals may help in superstitions and prejudices against realisation of the good in education.
- b) A vigorous programme of social development among Santal Community. This would come through a national system of social education for the tribal people. It would be more than literacy movement. It would include the entire canvas of tribal life in these areas. It would create in the tribal mind a consciousness of their own surroundings, problems and needs together with a new sense of national sentiments.

2. To develop proper psychological support:

- a) Teachers should play the role of counsellors with family and child together as a unit to create proper attitude among the tribal people towards different developmental issues. Proper counselling would help them realise the importance of education of their children and its future course of consequences.
- b) Since the tribal children have cognitive and cultural deficits, the compensatory pre-school education for them should be designed to compensate their reading and writing abilities before taking admission in

contd.

in primary schools.

3. Economic Support:

- a) The school schedule, holidays and vacations should be adjusted in accordance with the needs of the community and the local economic and agricultural operations, so that children can assist their parents in their economic activities.
- b) Government should make arrangements for stipends, book-grants and the provision for mid-day meals for the tribal children in order to create interest towards school and education.
- c) In case of education in the Primary stage for the tribal students, it should be craft-oriented. The craft should be suitable to the local conditions.

4. School Setting:

- a) Mother tongue of the tribal communities should be used as bridge language during the first year or so at the Primary stage to be ultimately switched over to the regional language.
- b) The text books for the tribal children in the Primary stage should be written in local dialect. It should contain information on daily life and about the different aspects of the tribal life and their culture.
- c) The attention should be given to the training of

contd...

the teachers meant to serve in the tribal areas. Knowledge about the language and the culture of the tribes concerned should be considered indispensable. The teachers should also be given training about the method of implementing instruction in tribal language.

- d) Steps have to be taken to involve the local community in different school activities. The school and community should be drawn together by making the parents and tribal leaders participate in some programmes or activities of the school.

R E F E R E N C E S

- Ambasht, N.K: A critical Study of Tribal Education with special reference to Ranchi District. Chand & Co., New Delhi 1976
- Broota, K.D: Socio-Cultural Factors in the development of Colour, form and size perception. Paper presented at Symposium on Social Experimental Psychology held at Allahabad University, Allahabad, 1979.
- Das, J.P. and Palvata, E.: Malnutrition and Cognitive Functioning. Academic Press, New Work, 1976.
- Das Gupta, N.K: Problems of Tribal Education and the Santal Bharatiya Adimjati Sevak, Sangh, New Delhi 1963
- contd.

- Elwin, V.(Ed): A new deal of Tribal India. The Manager of Publication, Govt. of India, New Delhi 1963, 84-90.
- Kochar, V.K.: "Ghosts and Witches among Santals".
Journal of the Mythic Society, 55,1964, 47-52.
- Mishra, G and Tripathy, L.B.: Psychological Consequences of prolonged deprivation. Additional Psychological Corporation, Agra, 1980.
- Mukher Jee, B: "Santals in relation to Hindu Castes"
Man in India 40, 1960, P.300-306.
- Prasad, L.B.: "Santal Religion at a glance"
Vanyajati, 20, 1972 89-92
- Prasad, S. : Modern Education among the tribals of Bihar in the Second-half of the 20th Century. Man in India, 51, 1971, P. 364-393
- Puspa, M.: Factors of Social Derivation affecting the Primary School Children. Indian Educational Review 16(2), 1981.

contd..

- Rathnaiah, E.V.: Structural Constraints in Tribal Education: A Regional Study. Sterling Publishers, New Delhi. 1977
- Report of the Backward Classes Commission. The manager of Publication, Govt. of India, New Delhi Vol.I, 1956, P-122-124.
- Report of the Scheduled Areas and Scheduled Tribes Commissions. The manager of Publication, Govt. of India, New Delhi. Vol.I 1962, P. 216-234.
- Roy Renuka: Report of the Committee on special multipurpose tribal blocks. Govt. of India, New Delhi, 1960, P 84-101
- Sachidananda: Socio-economic aspects of Tribal Education in India in Report of the National Seminar on Tribal Education in India, NCERT, 1967, P. 104-108
- Sachidananda: The tribal situation in Bihar in K.S. Singh (Ed.), Tribal situation in India. Indian Institute of Advanced Study, Simla, 1972.
- Sharma, B.R.: "Professionals" in the making their goals and values. Manpower Journal X II, 2, 1976.

- Singh, A.K.: Social disadvantage, intelligence and academic achievement. Paper presented at the 14th Annual Conference of the IAAP, I.I.T., Kharagpur, 1976.
- Singh, L.B. and Sinha, B. "The Santal students: their intelligence and achievement motivation". The Indian Journal of Social work, XLIV, 1983, 167-173
- Sinha, D.: "Study of Psychological dimension of Poverty. A challenge and a necessity". Journal of Social and Economic Studies, Vol.4, 1976, 167-200
- "Socio-Cultural Factors and Development of some perceptual skills". Indian Journal of Psychology, 52, 1977 P 115-132.
- "Socio-Cultural deprivation and acquisition of perceptual and Cognitive Skills in Indian Children: A review of unpublished papers. Psychology Deptt. Allahabad University, Allahabad, 1980.
- Sinha, S.; "Santals and their Problems. The Indian Nation". Sunday Magazin. Oct, P.7-8. 1979

Srivastav, L.R.N.; Some Basic Problems of Tribal
 .. Education. Report of National Seminar
 on Tribal Education in India. New
 Delhi, NCERT, 1967. 77-82.

Identification of Educational Problem
 of the Saura of Orissa, NCERT,
 New Delhi, 1971.

STUDENT TEACHERS AND TEACHING PROFESSION

R.D. Sharma
Centre for Policy Research,
New Delhi.

ABSTRACT

The present study aims to find out the reasons attracting young man and woman towards teaching profession. A attitude scale constructed by Chauhan (1983) was used for this purpose. The sample consisted of 123 student teachers (70 male, 53 female). The study reveals that immediate solution for employment and 'to pass the time' are most important factors which motivate them to join teacher's training course.

Introduction:

There are many professions in our country available for youngmen and women, which they may choose after graduation or post-graduation.

There has been a tendency amongst youngmen and women to prefer administrative, executive and other increative services. Those who fail to achieve these, try to get a job from amongst other employment opportunities accessible to them. There is hardly a consideration for one's interest and aptitude. This helps increasing number of misfits on the jobs. Teacher education is no exception to it.

For various reasons teaching profession is usually a last choice for young generation. It is only recently that persons with good qualifications are entering into teaching profession. But for success as a teacher only academic qualifications cannot serve as a sole criterion. Persons with undecided mind and anxiety can not deliver the good whatever profession they join. The present investigation has been attempted to find out factors responsible for selecting as a career.

Objectives of the Study

Following were the objectives of this study:

1. to find out the reasons for taking admission in B.Ed. course.

2. to explore the relationship between sex and reasons.
3. to find out the effect of marital - status on attitudes of male and female students vis-a-vis teaching profession.
4. to examine the impact of economic status choice of the job as teachers.

Design of the Study:

Method: Normative survey method was employed for conducting the present investigation, cross sectional approach was followed.

Sample: The sample consisted of 123 student teachers (70 male, 53 female) pursuing their B.Ed. degree at Regional College of Education (NCERT), Bhopal and Govt. College of Education Bhopal during the session 1983-84. Cluster random sampling technique was employed.

Instrument used: Hindi version of the Attitude Scale constructed by Chauhan (1983) was employed for this study. The scale comprises of twenty items of Likert type. Besides these items their marital status and guardian's income were also recorded on the same tool.

Analysis and Interpretation of Data:

Data were analysed to study the relationship of three factors namely, sex, marital-status, and economic status with each item. Rank correlation coefficient was

calculated to explore the agreement and variability on each item between males v/s females and unmarried v/s married. Kendall's correlation coefficient, was used to find out the impact of economic status on the agreement and variability on each item and the level of significance was also determined with the help of table P (Non-parametric statistics for the behavioural Sciences by Siegal, (1956) and appendix M (Basic Statistical Methods by Downi and Health, (1970). The obtained results have been summarized in Table below:

CORRELATIONS BETWEEN SEX, MARITAL-STATUS
AND ECONOMIC STATUS ON EACH ITEM

Item No.	Sex-Difference	Marital-Status	Economic-status
1.	.675	-.875	.694
2.	.775	.225	.728*
3.	.375	.80	.839**
4.	1.0**	.987*	.872**
5.	.575	.013	.306
6.	1.0**	.90*	.928**
7.	.65	.862	.817*
8.	.70	.025	.839**
9.	-.375	-.375	.528
10.	.69	.9*	.839**
11.	.75	.725	.822**
12.	.80	.025	.583
13.	.80	.95*	.8*
14.	.975	.875	.955**
15.	.675	.90*	.84**
16.	.6	.975*	.828*
17.	-	-	.8*
18.	.7	.675	.461
19.	-	-	.905**
20.	3	.7	.794*

*Significant at .05 level,

** = Significant at .01.

Positive correlations were found (significant at .03) between married and unmarried student teachers on item 4, (I took admission in B.Ed. because it may help men in getting job early), item 6, (I am interested in teaching profession that is why I took admission in B.Ed.), Item 13, (I took admission in B.Ed. to fulfil my husband/wives desire I was not interested in it) Item 15, (I was not interested in teaching profession but my parents insisted me) and Item 16, (Teaching profession is an honest and less corrupt profession). When persons from different economic status were compared on each item they also showed positive correlation (.05 level of significance) were found on item 2 (I could not get any job despite of my best efforts) Item 7, (I tried to get admission in Ph.D. but I could not get, therefore, I took admission in B.Ed.), Item 11, (I have to appear in a competitive examination, I am preparing myself for that and doing B.Ed.)simultaneously), Item 13, 16 and 17 (My father can give less dowry in my marriage therefore I am doing B.Ed.), High positive correlations (.01 level of significance) were found on item 3, (It is easy to get admission in B.Ed. because there is no competitive examination for its admission), Item 4, 6 and 8 (I took admission in B.Ed. because it may help me in getting job in emergency) Item 11, and 14 (I will get good bride/bridegroom after doing B.Ed.), Item 15 and 19 (I am doing B.Ed. because my parents will get more dowry in my marriage).

An exact correlation was found on item 4 and 6 when males were compared with females.

Conclusions:

The above analysis revealed two main factors - immediate solution for unemployment and to pass the spare time, which motivate students to take admission in B.Ed. A similar finding was also reported by Chauhan (1983). Other factors responsible for their inclination towards teaching profession in order of their merit were, interest in teaching profession, insistence by their parents or life partner.

Recommendations - It is clear from the data that students with middle and low economic status come for teaching profession because they feel an urgent need for employment to support their family. Therefore, there should be proper manpower planning so that the unemployment problem of trained teachers be minimized. There should be an aptitude tests and interview method to judge their interest towards teaching profession.

REFERENCES

1. Chauhan, C.P.S., Chhatr Oan Dwara B.Ed. Main Preevash Lamb
Ki Karanaon ka Adhyayan, Bharatiya Acharya
Shiksha, July, 1983.
2. Downi, N.M. and Heath, R.W., Basic Statistical Methods
Third Edition, 1979, Harper International
Edition Harper and Row, Publication,
New York.
3. Garrett., Henry E., Statistics in Psychology and Educa-
tion, 1966, Vakils Feffer and Simons'
Private Ltd. Bombay.
4. Siegal, Sidney, Non-Paremetric Statistics for the
Behavioral Sciences, 1956, Mc-Graw Hill
Book Company Inc. Tokyo, Japan.

-17.1.

" E D U C A T I O N & W O R L D P E A C E "

"Since war begins in the mind of men it is the
mind of men that the defence of peace must be
created"

. U.N.O.

SAKTI PRASAD MISHRA
C.I.E.T. N.C.E.R.T.
NEW DELHI-110 013

.

The ignorant man is not the unlearned, but he also does not know himself and the learned man is stupid, when he relies on books, on knowledge and on authority to give him understanding. Understanding comes only through self-knowledge which is awareness of ones total psychological process. Thus education, in its true sense, is the understanding of oneself, for it is within each one of us that the whole of existence is gathered.

What we now call education is a matter of accumulating information and knowledge from books, which any one can do who can read. Such education offers a subtle form of escape from ourselves and like all escapes, it inevitably creates increasing misery. Conflict and confusion results from our own wrong relationship and alter it, mere learning the gathering of facts and the acquiring of various skills can only lead us to engulfing chaos and destruction.

To discover, what part of education can play in the present world crisis, we should understand how that crisis has come into being. It is obviously the result of wrong values in our relationship to people, to property and to ideas. If our relationship with other is based on selfcentredness and our relationship to property is acquisitive, the structure of the society is bound to be competitive and self isolating. If in our relationship with ideas we justify one ideology in opposition to another, mutual distrust and ill-will are the inevitable results.

17.3.

Another cause of the present chaos is dependence on authority, on leaders, whether in daily life in the small school or in the university. Leaders and their authority are deteriorating factor in any culture. When one fellow another there is no understanding, but only fears and conformity eventually leading to the cruelty of the totalitarian state and the dogmatism of organized religion.

To rely on govt to look to organisations and authorities for that peace which must begin with the understanding of ourselves is to create further and still greater conflict and there can be no lasting happiness as long as we accept a social order in which there is endless strife and antagonism between man and man. If we want to change the existing conditions, we must first transform ourselves which means that we must become aware of our own actions, thoughts and feelings in every day life.

But we do not really want peace, we do not want to put an end to exploitation. We will not allow our greed to be interfered with, or the foundations of our present social structure to be alerted, we want things to continue as they are, with only superficial modifications, and so the powerful the cunning inevitably rule ourselves.

Peace is not achieved through any ideology it does not depend on legislation, it comes only when we as individuals begin to understand our own psychological process. If we

avoid the responsibility acting individually and wait for some new system to establish peace, we shall merely become the slaves of that system.

And even though we may all be well fed, clothed and sheltered, we shall not be free of our conflicts and antagonisms which will merely have shifted to another plane, where they will be still more diabolical and devastating. The only moral or righteous action is voluntary and understanding alone can bring peace and happiness to man.

Beliefs, ideologies and organized religions are setting us against our neighbours, there is conflict, not only among different societies, but among groups within the same society. We must realize that as long as we identify ourselves with a country, as long as we cling to security, as long as we are conditional by dogmas, there will be strike and misery both within ourselves and in the world.

The constantly repeated assertion that we belong to a certain political or religious group, that we are of this nation or of what flatters our battle egos, puffs them out like saips, until we are ready to kill or be killed for our country, race or ideology. It is all so stupid and unnatural. Surely human beings are more important than national and ideological boundaries.

The separative spirit of nationalism is spreading like an over the world. Patriotism is cultivated and cleverly exploited by those who are seeking further expansion, wider powers, greater enrichment and each one of us takes part in this process, for we also desire these things. Conquering other lands and other people provides new markets for goods as well as for political and religious ideologies.

One must look at all these expressions of violence and antagonism with an unprejudiced mind, that is, with a mind that does not identify itself with any country, race or ideology but tries to find out what is true. There is a great joy in seeing a thing clearly without being influenced by the nations and instructions of others whether they be the Government, the specialists or the very learned. Once we really see that patriotism is a hindrance to human happiness, we do not have struggle against this false emotion in our selves, it has gone us for ever.

Nationalism, the patriotic spirit, class and race consciousness, are all ways of the self and therefore separative. After all, what is a nation, but a group of individuals living together for economic and self protecting reasons? Out of fear and the acquisitive self defence arises the idea of "my Country", with its boundaries and tariff

walls, rendering brotherhood and unity of man impossible. In every country the Government encouraged by organized religion is upholding nationalism and the separative spirit. Nationalism is a disease and it can never bring about world unity. One of the chief causes of hatred and strife is the belief that a particular class or race is superior to another.

Can we ever attain peace through violence? Is peace to be achieved gradually, through a slow process of time? Surely, love is not a matter of training or of time. The last two wars were fought for democracy. I believe, and now we are preparing for a still greater and more destructive war, and people are less free. But what would happen if we were to put aside such obvious hindrances to understanding as authority, belief, nationalism and the whole of hierarchical spirit? We would be the people without authority, human beings in direct relationship with one another and then perhaps, there would be love and compassion.

What is essential in education as in every other field is to have people who are understanding and affectionate, whose hearts are not filled with empty phrases with the things of mind.

If life is meant to be lived happily with thought, with care, with affection, then it is very important to understand our selves if we wish to build a truly enlightened society, we must have education who understand the ways of integration and who are therefore capable of imparting that understanding to the child.

Without a healthy form of international understanding the modern world will be always running the risk of untold miseries, sorrows, sufferings even the global, destruction and total annihilation. Romain Rolland has therefore rightly said "The two global wars, with their terribly devastating results, have atleast established the fact that the narrow bonds of solid and aggressive nationalism must be smashed through an unwalled and unbedged federation of mankind should be brought into being for fostering human relations on the plane of love pity and sympathy. To love one's own country is a desirable disposition. But to hate other countries is not only undesirable but also suicidal. That is why Bertrand Russell has observed "Patriotism in its common form is the worst vice from which the modern world suffers".

In order to eradicate such difficulties internationalism and international understanding is to be promoted through our education. No country should have any biased attitude

towards any other country and everybody should have an open mind to every thing. That is the scientific attitude towards all the matters in life. In this context the noble spirit and sentiment expressed by our ancient Indian Sanskrit verse is laudable and ideal. It says सर्वे भवन्तु सुखिनः, सर्वे सन्तु मिरामयन्तः, सर्वे भद्राणि पश्यन्तु, मा कश्चिद् दुःखभागभवेत्..which means "May all people of the world be happy and free from diseases, may all perceive welfare and none in grief". The old tradition and glorious culture of India are always cosmopolitan and seek universal friendship and brotherhood based on mutual love, sympathy and understanding. The values like mutual toleration, liberal outlook, human sympathy and ~~companionship~~ are the life blood of the Indian heritage. The ancient Indian art, literature, and religion are replete with the instances of such good deeds and thoughts. Another Sanskrit verse very well conveys the lofty ideals of toleration and magnanimity cherished by India through ages. This says - अयं निजः परो भूतिः, ज्ञानं लघुवेतमाम्, उदार चरितानाम् तस्यैव कृदुत्कृष्टम्.....which means It is the thought of little minded persons, who say that this thing belongs to me, and that to others, but to liberal minded persons, the world is just like a family. Such a feeling of world family is expected only of a liberal minded man and such cosmopolitanism is conducive to international understanding and universal brotherhood.

Then question arises that what should be the role of education in promotiry international peace. The United Nations Educational, Scientific and Cultural Organisation in its preamble has enuciated "Since wars begin in the minds of men, it is the minds of men that the defences of peace must be constructed - the wide diffusion of culture and education for humanity, for justice, liberty, and peace are indispensable to the dignity of man and constitute a sacred duty which all the nations must fulfill on a spirit of mutual assistance and concern. As wars and peace are closely related to the mind. Knowledge and understanding critical thinking, favourable attitude, kindness or otherwise education is the most potential instrument for moulding the mental make up and its faculties. Importance of education for maintaining international peace and understanding cannot be overestimated and the guiding principle of education must influence internationalism in majority. The agencies of education do not limit themselves to different informal as well as formal agencies including all the mass media like Radio, T.V., Press, Cinema and soon.

International understanding can develop only through right type of education, which will allow full awareness, from healthy attitude, create desirable interests,

promote critical thinking and appreciation among the students. It is the important responsibility of educational institutions to generate a suitable atmosphere in which children can develop the feelings of oneness and world unity. Students should feel that they are the members of one world community and be encouraged to practice tolerance, mutual help and respect for others. The Seeds of world citizenship can be sown in the classrooms, or in the school campus.

Internationalism is not a plant that will grow of its own accord. It is a tree to be planted, nourished and well trimmed, it has to flourish with the rich experiences of life in the school and outside, it has to bear its flower and fruit of amity and concord, understanding and friendship, in a healthy and wholesome atmosphere.

Teachers have to play a very significant role in developing international understanding among the students. Success of each programmes largely depends on the competence of the teacher his knowledge understanding, attitude, interests, critical thinking and so on. The teacher is the catalytic agent for realising the desired objectives and for translating the dreams in to realities. How-ever satisfactory the curriculum and methods may be, unless the teacher has adequate

knowledge, skills and sincerity for utilising them, no objective can be achieved.

The teacher can impart the true facts and informations about various nations or countries effectively. He can form suitable habits and create positive attitudes in students for the growth of internationalism. He can bring home to children the truth that colour or creed or race makes no difference or creates no barrier if they have true perspective of information and orientation. Inertia, difference and ignorance are greater sins than doing harm to any country or nation. The Kothari Commission has therefore said "The Sins are more often now of Commission than of active Commission" we should however guard ourselves against this also for ignorance is often not less dangerous than hostility.

The teacher should be trained and oriented in the values and ideals of internationalism and in acquiring the necessary skills and appropriate methods of educating students in international friendship, unity and understanding for maintaining world peace.

Since the modern sinking world is often threatened with catastrophic events, all efforts are to be made for promoting mutual trust, cooperation fellow feeling, love, sympathy and good will among nations. The entire world is

17.12.

now linked up with the heads of common destiny. No nation can keep itself aloof from others and its happiness exclusive of others. Peace and war cannot be confined to a particular area. They will affect the whole world sooner or later. Peace is like a cool breeze slow and steady, but war is like wild fire sharp and sudden. Unless we are always prepared for defending peace, war will take us a back at any time. The International Organisations like U.N.O., UNESCO are doing their best to ensure peace and avoid war. But all the nations should have proper understanding about each other, and view each national, international problem in its true perspective.

Lastly to conclude "the Education and world peace, I would like to emphasise again that India has the glorious heritage of universal brotherhood and good will, toleration and compassion and we as the teachers and teacher educators of this great nations should continue to ensure its status and position, and ideologies in the world map or culture and friendship in maintaining world peace in up-most respect.

-o-o-o-o-o-o-

NON-FORMAL EDUCATION: SPECIAL REFERENCE TO ORISSA

Miss Joudamini Mohapatra
Faculty of Education
Jamia Millia Islamia
No. Delhi-25

ABSTRACT

This paper deals with pointing out the relevance of nonformal education system besides formal and informal system. A brief account of the development of nonformal education has also been given specially with reference to the state of Orissa. Lack of investment, insufficient motivation, dearth of physical facilities, lack of public faith in the scheme, uncertain quality norm, unsuitable climate etc. are some of the reasons putting into problems to this nonformal education scheme. Certain remedial measures have been suggested by the author to overcome these difficulties in the way of popularising nonformal education.

Considering the global situation, we will see that there are two great things which is going to grab the human society. Among these the high growth rate of illiteracy and the explosion of population are of paramount importance. If we will analyse the problems of illiteracy from a wider angle, we will see that nearly eighty crores of world population are illiterate, out of which 39 crores are from India. Fifty lakhs of illiterates are added every year to illiterate population in India. Although, India stands in the forefront of development among the third world nations, illiteracy is one of the greatest impediments for further progress. In order to provide them with the basic elementary education, the Central Government is trying its best. It is evident that the Formal Schools are inadequate to impart primary education throughout the country in rural as well as tribal areas. So the Non-formal education plays a key role to educate the rural and Tribal Children.

The Central Advisory Board of Education at its session held in November, 1974, and November, 1975, sent strong support to the introduction of gradual development of scheme of Non-formal Education. It was felt that more reliance on formal education was disproportionate both to the growing qualitative requirements and to the increasing demands for the greater relevance of education.

Realizing the needs of Non-formal Education in India, the Government of India have launched a scheme of Non-formal Education for Children of 6-14 age-group in nine educationally back-ward States, viz. Andhra Pradesh, Madhya Pradesh, Bihar, Jammu & Kashmir, Assam, Orissa, Rajasthan, Uttar Pradesh and West Bengal in collaboration with the State Governments concerned.

Let us examine what is Non-formal Education and how it is different from Formal and Informal system of education.

Non-formal Education is an arranged system which is merely afford at convenient places, time and according to the level of understanding children or adults. Unlike the formal system of education, it neither offers a fixed timetable nor does it have a pre-determined courses of study and of course it does not equip any one with a graded certificate. The Non-formal system has nothing in common with the formal ^{system} which suffers largely from an authoritarian outlook fixed goals, pre-determined curricula and very qualified academic teacher, whose sole purpose is to see that their words succeed at the terminal examinations. But in the Informal education, the education is given incidentally, unconsciously and unstructured. Philip H. Coombs, Roy, C., and Professor Manzoor Ahmed (1976 p.11) defines Non-formal Education as "any organized educational activity outside the established formal system whether operating separately or

as an important feature of some broader activity that is intended to serve identifiable learning clientele and learning objectives.

The main objective of Non-formal education is to equip the individual better to meet his role expectation in his various walks of life.

The system of Non-formal Education in India dates back to the antiquity, right from the Vedic Education. But the systematic research in this field first started by Gadgil (1945) problem of lapse into illiteracy. This pioneering work was followed by other research projects after a lapse of more than a decade by Singh (1957) and Khan (1958). Who undertook research on communication of ideas through adult education and problems of Social Education. Chaube (1963) Singh and Prasad (1965) Prasad (1967) and Dharm-Vir (1968) undertook studies in youth activities literacy development and adult interest, Sharkar (1972) Kudesia (1973) Agnihotri (1974) B.K. Taheddar (1975) studied the need and importance of non-formal education.

In Orissa, the studies by Pujari (1977), Bisoi (1978), Tripathy (1981), Samantaray (1982), stated the needs of non-formal education to attain literacy, numeracy, improve vocational efficiency and enable those who have not completed a stage of education. In 1980, the experimental project of non-formal education centres was introduced in Orissa. By 1983-84, there were 7,000 Non-formal Primary

Level Centres in the State of Orissa and 700 Non-formal Centres, attached to S.T. Schools were under the control of S.C.E.R.T. and 5,300 were under the control of Director of Elementary Education. There are at present two types of Non-formal centres in our State, i.e., Prathamika Chatasalies on Primary Non-formal Centres and Madhyamika Chatasalies on middle level Non-formal Education Centre. There are two Non-formal level Centres alongwith 10 non-formal primary level centres under each Secondary Training Schools. One Teacher Educator in each secondary training school is incharge of 12 non-formal centres in respect of their management and supervision, guiding the teachers trainees to develop learning episodes, implementation of secondary syllabus for S.T. Schools.

The strategy will, no doubt, considerably reduce dropouts, wastage, and the number of non-attending children. The following Table reveals the present position of Non-formal Education in Orissa:-

TABLE 1

Statistics for 1983-84

No. of Madhyamika Chatasalies				
	S.C.	S.T.	Other	Total
Boys	231	212	321	764
Girls	128	168	232	588
				<u>1352</u>

No. of Prathamika Chatasalies : 720

No. of Boys -	10314	}	15471
No. of Girls -	5157		

No.	Age Group	S.C.	S.T.	Other	Total
1.	6 years to 8 years(Boys)	1242	323	4122	8595
2.	6 years to 8 years(Girls)	1109	965	1789	3863
3.	9 years to 11 years(Boys)	421	447	851	1719
4.	9 years and above 11 years (Girls)	441	216	637	1294
Total		3213	2051	7399	15471

Source: Directorate of School Education, Adult and Non-formal Education branch, Orissa.

From the above data we are clear in our view that non-formal education programme is now at infant stage in our State and is confronted with varied problems. They are mentioned below:-

1. There is lack of investment in this area since it incurs heavy financial expenditure to implement this programme as against the suggested norm of expenditure than Rs. 12200 per capita approximately (excluding textbooks).
2. Sufficient motivation is lacking for the learners.
3. There is dearth of physical facilities.
4. There is lack of public faith on the scheme for its doubtful relevancy.
5. The quality norm of the scheme is yet uncertain.
6. The non-formal learners do not belong to the privileged classes.
7. No suitable academic climate is sufficiently found to launch the programme along with its diversified curricula, local need based learning materials; trained teachers are not available to handle this programme.
3. There is lack of positive attitude of the administrator as well as the legislatures in a constructive way towards this scheme.
9. Lack of co-ordinated efforts for the effective organisation of this scheme.
10. There is parental apathy towards the education of the illiterate matured girls.
11. There is too much involvement of children in various economic activities.

12. There is lack of initiative of other voluntary agencies in this area.

13. There is frequent fluctuation in the Government policy.

To overcome these problems of the Non-formal Centres in Orissa, few possible suggestions are given below:-

1. Additional Non-formal Education Centres should be opened, where the students enrolment is more than twenty five in number. To control and to teach a class of more than twenty-five students become impossible on the part of a facilitator for the effective Teaching-Learning Process.

2. The Administrators and the supervisors of the Non-formal Education Centres should pay attention to the regular running of the Centres.

3. The learners at the Non-formal Education Centres should be grouped on the basis of their knowledge, skill, experience.

4. Proper classroom, furniture, electricity should be provided to the centres, so that physical difficulties can be removed.

5. Training of the facilitator is the most important component for the success of Non-formal Education Programme. Therefore, there is need of well qualified experienced, seasoned and devoted teacher who feels pleasure in facing the challenges of educating the non-starters and school drop-outs. The facilitators should also be made aware of the concepts of the programme and the criteria of opening of the Non-formal Education Centres.

References:-

1. Coombs; Philip H. with Professor Roy C. and Ahmed,
New Patterns to Learning for Rural Children and Youth
Vidya Mandal, K-2/7, Model Town, Delhi.
2. Goodman, P. What Use in Formal Schooling, Education the
More UNESCO. Press Vidyamandal, 1975.
3. Kochhar, S.K. Pivotal Issues in Indian Education.
4. Naik, J.P. Some Perspective on Non-formal Education Allied
Publisher.
5. Singh, R.P. Non-formal Education and Alternative to Formal
System.
6. Aggarwal, J.C. The Progress of Education in Free India.
7. Shukla, P.D. Towards the New Pattern of Education in India.
8. Griffin, W.H. Community as a Non-formal Complement to the
Formal Education an unpublished paper for the May
Conference on N.F.E., 1971.
9. Habrison, F.H. Developing the Potential of Non-formal
Education, draft of a paper (unpublished) Nov. 1970.
10. Second Survey of Indian Education
11. Indian Journal of Adult Education, Vol. 43, No. 10,
October, 1982.
12. Non-formal Education Experimental Programme, 9-14 Age
Group (NCERT Publication)

13. Non-formal Education, Directions and Responsibilities

Reproduced by the Directorate of School Education, Adult
(Non-formal Education Branch, Orissa, Bhubaneswar).

14. Experimental Non-formal part-time classes for Universalisation of Elementary Education in Orissa. (Government publication).

6. The facilitator and the teacher educators should be oriented and acquainted with the language of the tribal and rural children.
7. Parents should be motivated to send their children to these non-formal centres.
8. Preparation of instructional materials should be developed in relation to the skill and demand of the Non-formal learners.
9. To meet the specific social, cultural, economic and environmental needs of the learners, the curriculum should be flexible and diversified one which would also be responsive to the day today problems of the learners. Teaching should be linked with different occupation, work and specific productive requirements of the learners residing in a particular locality.
10. In a functionally education set-up teaching should be linked with different occupations, work and specific productive requirements of the learners residing in a particular locality. This programme should be developed around specific tasks like agriculture, tailoring, industry, preparation of bricks and wood spinning to meet the personal and special need in particular and community needs in general.
11. Textbooks and other instructional materials should be provided to each students to eradicate the problem of poverty.
12. Salary/remuneration of the facilitator should be at least Rs. 300/- per month instead of Rs. 105/- per month and

steps should be taken for regular payment at the end of every month.

13. The supervisors should pay visits to the learners homes and should study their personal problems they should also make people conscious of their role for their development.

14. Steps should be taken by them to eradicate the management difficulties of the centres.

Thus the successful implementation of this scheme is waiting for an opportunity and co-ordinated efforts of the public, government, administrators and academicians.

NEED FOR FORMAL EDUCATION FOR
TRIBAL CHILDREN

V. Rama Rao,
Junior Project Fellow
DTESEES, NCERT,
New Delhi.

ABSTRACT

Present paper deals with the need of formal education for the weaker section of society, especially tribal population. Emergence of formal education for such a group has been viewed with regarding to various sociological aspects. Reference of various safeguards in the constitution, relevance of efforts to accelerate the universalization of education has been stated. Certain internal and external constraints have also been discussed and various remedial measures are put forward for effective planning of formal education for tribal children.

EDUCATION in the present times is the crucial investment to explore the avenues for development and to achieve self-sufficiency. It is more true in case of Scheduled-Castes and Scheduled Tribes and other weaker sections who are excluded from learning and ^{who} suffer extreme poverty. In Post-Independence Period though some efforts were made to educate these disadvantaged groups, only after Independence the constitutional framers emphasised that every individual has equal right and should have opportunity to get education irrespective of caste, creed, race, religion and sex.

Every society in whatever stage of development it is, provides training for the very survival in the immediate environment. The kin, family, peer group and other organizations help the child in learning process which is (or informal) in the formal way. Most of the formal education in early stage is an unconscious process.

The present age people mostly depend on formal education. The society demands a man with proper adjustment, socialization, dynamism and flexibility. Here comes the conscious learning procedure through formal education system imparted in the schools. It has three main components which play important roles: they are, the school, the students, and the teachers.

Though the formal education system is quite new to tribes yet one cannot deny the existence of a system of education in the tribal world imparted through youth dormitory-

ies to the young unmarried boys and girls. The dormitories in the tribal world is a place the purpose of which is to educate younger generation about the norms and values of tribal life and given instructions in religious, socio-economic, politico-administrative spheres of their life. However, in the changing times these dormitories are becoming extinct in most of the tribal communities. In the place of dormitories now formal educational institutions are coming up as a result of the influence of neighbouring culture. But these institutions are not useful for their routine daily life due to unsuitable content and alien medium of instruction. Several writers have pointed out that the tribals look upon modern formal education with suspicions for they feel that it bring disequilibrium in their socio-cultural system and detribalises the younger generation.

Even though to serve them better the need of formal education to tribes is felt everywhere in India. The tribes habitations usually correspond with isolated, inaccessible hilly areas which are away from the remaining parts of the country. They maintain unique identity with their traditions, culture and social organisations. Due to their physical proximity they were deprived of formal education for centuries. "Many Tribal Parents regard the spread of education with apprehension, for they feel that their boys and girls will be turned into 'sahibs' and 'memsahibs' with new and expensive habits which they can ill-afford and that

when they have left school they will leave their houses".

For reasons like their concern for the protection of distinct tribal culture they opted to insulate the tribes from the rest of the country by enacting laws and creation of tribal council for administration with certain degree of independence. Thus to some extent the British government policy of isolation deprived them the fruits of formal education. However, free India preferred the policy of assimilation that the tribal people can join the main stream of the Indian life.

However, India being a democratic country attached much importance to education and have given priority to impart education to the entire population by compulsory and free universalization of elementary education.

Constitutional Safeguard (Provisions)

Various safeguards that have been provided in the Constitution for promoting the interest of the people belonging to weaker sections particularly the Scheduled Tribes and Scheduled Castes. Framers of the Constitution being aware of the conditions and down-troddenness of these weaker sections had timely responded to their plight and special provisions are incorporated in the constitutions to overcome their difficulties and eliminate the existing social inequality.

The various constitutional safeguards that are provided for scheduled tribes have fallen under three broad categories

all aimed at their welfare, upliftment and development.

They are:-

1. Political - reservations of seats in legislatures and local bodies.
2. Protective - Special legislations for protecting economic interests.
3. Development - Implementation of Special Programmes for educational and socio-economic development.

Since education is an essential pre-requisite to the all round development of tribal people our constitutional framers have taken care to promote education among tribal people. Article 46 of the Constitution lays down that "the State shall promote with care educational and economic interests of the weaker sections of people particularly of the Scheduled Castes and Scheduled Tribes and shall protect them from social injustice and all forms of exploitation". Article 29 and Article 30 provides necessary safeguards to protect the cultural mores of any culturally distinct group of population in India and provides equal opportunity of education for every one.

Article 29 - (1) Any Section of citizens residing in the territory of India or any part thereof having a distinct language, script and culture of its own shall have the right to conserve the same.

(2) No citizen shall be denied admission into any educational institution maintained by the State or received aid out of

State funds on grounds only of religion, race, caste, language or any of them.

Article 30 - All minorities, whether based on religion or language shall have the right to establish and administer educational institutions of their choice and that the State shall not, in granting aid to educational institutions, discriminate against any educational institutions on the ground that it is under the management of a minority, whether based on religion or language.

Constitution further provides through Article 164, the necessary room for speedy tribal welfare by creating administrative provision of appointing Minister Incharge of Tribal Welfare in certain States.

Article 164 - The Chief Minister shall be appointed by the Governor and the other ministers shall be appointed by the Governor on the advice of Chief Minister and the minister shall hold office during the pleasure of the Governor.

Provided that in the States of Bihar, M.P. and Orissa, there shall be a Minister Incharge of Tribal Welfare who may in addition be in charge of the welfare of the Scheduled Caste and backward classes or any other.

Article 338 of the Constitution envisages the appointment of special-officer for SCs and STs to ensure that the Scheduled Tribes and Scheduled Castes are properly covered by the

safeguards provided by the Constitution.

Article 338 . (1) There shall be a Special Officer for the SCs and STs to be appointed by the President.

(2) It shall be the duty of the Special Officer to investigate all matters relating to the safeguards provided for the Scheduled Castes and Scheduled Tribes under this Constitution and report to the President upon the working of those safeguards at such intervals as the President may direct, and the President shall cause all such Reports to be laid before each house of Parliament.

(3) In this Article reference to the SCs, STs shall be construed as including references to such other backward classes as the President may, on receipt of the report of a Commission appointed under clause (1) of Article 340 by order specify and also to the Anglo-Indian Commission.

Article 339 - empowers the union to take necessary control over the administration of Schedule areas and the welfare of the STs, as Article 340 empowers the President to appoint a Commission, if he feels necessary to investigate into the conditions of social and educationally backward classes within the territory of India, to make necessary recommendations so that the Union and the State ^{take} suitable remedial measures.

Under the 7th schedule Constitution empowers the President to enlarge or decrease the scheduled areas.

Grant is provided to States by the Government of India to meet the cost of the developmental schemes for the welfare of the Scheduled Tribes or raising the level of administration of the Scheduled areas.

In addition special constitutional provisions have been made with reference to ASSAM, NAGALAND, MEGHALAYA and Union Territory of MIZORAM.

Besides taking ~~initial~~ steps of taking elaborate measures in the Constitution to safeguard and promote the interests of disadvantaged groups, Govt. with the aim of encouraging formal education among the STs has introduced various incentive schemes from Primary education level to the University education. They are in form of attendance scholarships, Mid-day meals, post-matric scholarships, free books, book banks, uniforms, opening of ashram schools/residentials schools etc. Some of the schemes are fully sponsored by the Central Govt. some are organized by the Central and State Governments. Some of the voluntary agencies working for tribal welfare have been provided with financial support.

More than 85% of the tribal people are still illiterate when the illiteracy level recorded at national level is just above 60%. It is an accepted fact that unless tribal people are educated they will not be having the necessary knowledge, confidence and navigation power to combat the external exploitation and lead the successful life with prosperity. The

is why Government has been ^{giving} importance to impart education among tribal people. Most of the financial assistance towards the welfare of the STs has been earmarked for the educational programmes.

Comparative Literacy Rates

	STs	General
1961	8.3	24.02
1971	11.30	30.79
1981	16.35	36.02

The Tardy Growth of literacy level among STs is due to Poly affect of many constraints which are both internal and external in nature. The internal constraints are those operating from our educational system itself and the external constraints are those operating from outside the education system.

External Constraints: There are of various nature like ecological, socio-economic psychological constraints etc.

Communication is the main problem in tribal areas. Spread of road communication is quite poor in tribal areas, and it is an established fact that the enrolment in road side schools is quite better than in interior village schools.

Though education upto primary level is free of cost yet tribal parents have to meet certain unavoidable expenses towards their children education which is hard to bear with their poor financial inflow. Moreover, a tribal child

irrespective of his age has to render physical help to his parents in their day-to-day life, which is making him to pay less attention on school education. Most of the tribal children are first generation learners and as such, the home does not supplement the educational effort made in the school. This is the root cause of high rate of drop-out and stagnation among tribals.

Internal Constraints - Unsuitable curriculum, medium of instruction, irregular teacher unsuitable period of vacation and lack of tribal/local teacher etc. It is very difficult to find suitable teachers to work in tribal area. Those qualified teachers posted in tribal areas, hardly continue to stay at their place of work for a longer time due to lack of facilities for their stay etc. That to most of the teachers working in tribal areas are from non-tribal area. With complete deprivation of knowledge of tribal culture, local language, no adjustment to ecology etc. he always looks for transfer from tribal area to non-tribal area in search of better facilities. Lack of facilities in school is another cause.

By close observation of existing socio-economic situation of tribes and the educational impediments in the present formal education system, one has to look for an alternative strategies of education. The strategy more suitable is non-formal education which is flexible in its content,

pedagogy and timings. . . . The present formal system cannot take care of the felt needs of the tribals. Hence along with formal education it is essential to have non-formal education to supplement and complement with each other in order to remove the gap between tribals and non-tribals.

References

- Burns, W.W.(ed) Education and the Development of Nations, Syrachise, Syllabus University Press, 1963.
- Chattopadhyaya, K.P.'Tribal Education' Man In India. Vol.33. No.1 (Jan-Mar) 1953.
- Census of India Reports, 1981.
- Das Gupta N.K. Problems of Tribal Education and the Santals New Delhi, Bharatiya Aadimasate Sevak Sangh, 1963.
- Govt. of India Report of the Scheduled Areas and Scheduled Tribes Commission, New Delhi, 1961, P.223.
- Govt. of India, Ministry of Home Affairs, New Delhi. Provision in the Institution of India for Scheduled Tribes.
- Ratnnaiah, E.V. Structural Constraints in Tribal Education (Regional Study) 1977. Sterling Publications Pvt. Ltd.
- Sachchidananda - Socio-economic Aspects of Tribal Education in Report of the National Seminar on Tribal Education in India, New Delhi, NCERT. 1967 . P. 104.
- Srivastava, L.R.N. - The Educational Problems in Indian Tribes - A Few Suggestions. Presented for Distribution to the International educational year seminar in Primary and Work-oriented Education held on November, 1970 at Vigyan Bhawan, New Delhi.

M I S C E L L A N E O U S

RURAL-URBAN DICHOTOMY: SOME COMMENTS AND
THOUGHTS ON CLASSIFICATION

B.R. Siwal
Faculty Member
National Institute of
Public Cooperation and
Child Development
New Delhi.

ABSTRACT

The definition of rural urban dichotomous classification bears some shortcomings in itself. The author has critically commented the definition of rural-urban classification given by the census of India 1951 and onwards. He suggests a trichotomous classification: urban, semiurban and rural for more valid and reliable results of scientific studies in place of the urban-rural classification.

Rural urban dichotomy has been used world wide for Census tabulation. Here it is pertinent to ask - Is there really such type of dichotomy? Before answering this question, it is relevant to discuss the prevailing definition of urban, infact rural has been considered as a residual category in Census tabulation.

Census of India from 1951 and onward defines urban area as follow:

- a) all places with Municipality, Corporation or Cantonment or Notified Town Areas.
- b) All other places which satisfy the following criteria:
 - i) a minimum population of 5,000
 - ii) at least 75 percent of male working population being non-agriculture.
 - iii) a density of population of atleast 400 persons per square kilometres.

The Director of Census operation were however, given some discretions in respect of some marginal cases in consultation with State Government, to include some places that had other district urban characteristics and to exclude under serving cases.

It is noticed from the Census definition that there are two distinct types of urban units. Those units which

satisfy criterion (a) by the virtue of a statutory notification. In other words, there would be referred to as a municipal board, contonment board, a notified area committee etc. The other types of urban units would be those which satisfy criterion (b). These would generally include places which would otherwise have been considered as rural.

The above Census definition of urban is far from satisfaction. Firstly when we consider population as a criterion, it does not by itself distinguish with the urban from rural what about the over grown villages^m which are so common in India. According to 1971 Census there were 6332 villages having population more than 5,000. Secondly, when one takes account and density criterion i.e. 400 persons per square kilometer, there are so many villages which satisfy this criterion. Thirdly, the criterion of occupation structure is highly ambiguous and subject to a series of criticism. Should one take the whole working population into account or only certain section, such as these in full time occupation of chief wage earners, present occupation as the past occupation and what about the people with dual occupation. Similarly, the criterion of local self-government also poses the problem. The local self-government Act under which places are given status of urban differ from state to state. Problem also arise due to boundary adjustment. Incomplete specification of condition in the definition of urban areas the 1971 Census led to exclusion of a number of places having urban local self-

government from the list of urban areas. Again the discretion of Director Census operation in respect of marginal cases for deciding 'urban' subjected to a series of arbitrary decision. It has been asserted many a time that an urban areas should be distinguished not merely on the basis of defined demographic characteristic but also on the basis of the level of infrastructure facilities. The criteria based on such considerations have not been adopted by Census of India while defining urban areas. The Census of India is now working on possibility of arriving at criteria based on such factors for defining urban area in 1991 Census but at the 1981 Census the conventional definition has been adopted.

Upto present day all terms of urbanism are highly relative. There is no clear cut scientific method of measurement of urbanism. Because there are so many indicators of urbanism and if one take all these into account to define urban then there will be many permutations and combinations and it would in no way help to arrive at feasible definition. Moreover, difficulties arises with regards to justification of indicators. Ashish Bose (1970) ^{has} rightly observed that 'Looking at the Census history of last eight decades one is strick by the voluminous discussion in numerous Census reports on the definition of 'Town'. Inspite of the massive literatures on the subject at time tedious at time consuming, but always controversial even latest Census Commissioner

did not reach the end of the journey. What is rural and what is urban? These questions still echo in the halls of international seminars and conferences and even new conferences and seminars only lead to confusion. Even United Nations Organisations is not able to find out the most feasible definition for its comparison of data about urban. The designation of areas as urban or rural is so closely bound up with historical, political, cultural and administrative consideration that the process of development of uniform definition and procedure move very slowly. Not only do the definitions differ one another but in actual fact they may no longer reflect the original intention of distinguishing urban from rural. The criteria once established on the basis of administrative sub-divisions (as most of the cases) become fixed and resistant to change.

Studies of rural and urban societies cast considerable doubts specially while studying small town and large size villages as to whether there is a rural urban dichotomy in India or even continuum. This depends upon whether urban and rural forms of social life are distinct. Ahmed and Ahmed (1966) arrived at the conclusion that Indian social life neither exhibits the rural urban dichotomy nor continuum of the western style. But when we do ^aclose study of socio-economic and demographic behaviour of rural and urban, one can observe the distinction between rural and urban however, this difference is less marked in case of small

town (class IV, V & VI) and large size village (population more than 5000). Many a time sociological studies use urban-rural classification, as given by the Census as one of the basis of independent variable. Some of the studies bring out rural urban differences and some not. On the basis of two different finding, they contradict and doubt each other finding Census definition of urban area present a continuum ranging from minimum to maximum.

With any present definition of rural and urban there is no definite point where the rural ends and where the urban begins. The concept of dichotomy is clear only when it applies to the two extreme ends i.e. most urban and most rural. The distribution is not really two fold, in which one part is wholly rural and other is wholly urban, but a graduated distribution along a continuum from the least urban to most urban and most rural to least rural and consequently, the line that is drawn between urban and rural for Census purposes is arbitrary. This two fold classification may lose its relevance when various statistics of large size villages and small size towns are analysed, while this classification may gain relevance when we analyse the statistics of large town (class I, II & III) which show entirely urban characteristics and small villages (Population less than 5000) show entirely rural characteristics. Here question arises how these localities which show mixed characteristics rural and

urban is treated on merit basis.

To overcome some of the above difficulties which are faced in dichotomous classification, there is need to generate in between category viz. semi-urban. This consideration does not invalidate the day classification but rather points to the need for a more systematic classification in accordance with the realities of the situation as it exist in India and many other countries. Sidney Goldstien in this context observed that in many countries dichotomy appears to be out dated. Thus it is recommended that three fold classification system should be considered for classification. International Union for the Scientific Study of Population also recommended for trichotomous classification. While Conference of European Statisticians suggested trichotomous classification for European countries.

REFERENCE

1. Ashish Bose, Urbansiation in India: An Inventory of Source Materials, Bombay Academic Book Co. 1970.
2. United Nations, Demographic Year Book, 1963, 1972, U.N. Publication, New York.
3. Ahmed & Ahmed, A Comparative Insuanly Into Rural-Urban Dichotomy, Indian Journal of Social Research. Aug. 1966 p. 101
Study of Population
4. Intermation Union for Scientific/ Basic Data Needed for the Study of Urbanisation.

SECULAR ATTITUDE OF PRIMARY

GRADE CHILDREN: A RURAL

AND URBAN COMPARISON

Dr. G.C. Upadhyay
National Institute of
Health & Family Welfare,
Munirka, New Delhi.

ABSTRACT

This paper presents a comparison of secular attitude of primary grade children of urban and rural setting with respect to their sex and parents' educational level. Uday Pareek's Secularity Scale was administered on a sample of 177 IVth and Vth grade students studying in two NMC, primary schools, situated in urban and rural localities. Results show that rural and urban students differ significantly in their secular attitude, boys are lower in secular attitude scores than girls, and parental educational level have direct impact upon secular attitude of children.

Secularism is one of the basic element in the process of modernization and it is the spirit which informs the constitution of India. Secularism has been defined as an attitude to life and a commitment to a set of values which can be described secular or opposed to supernatural. The meaning of secularism according to Webster's International Dictionary 'a view of life or of any particular matter based on the premise that religion and religious consideration should be ignored or purposely excluded; a system of social ethics based on doctrine that ethical standard and conduct should be determined exclusively with reference to present life and social well being without reference to religion; not formally related or controlled by religious body and rationally organised around utilitarian values and patterns receptive to new traits".

The constitution establishes no state of religion, no category of preferred citizens, throws citizenship open to all, guarantees equality of status and of opportunity, promises to promote the dignity of individual, prohibits discrimination by any agency on the basis of religion, it eschews forced assimilation to preserve the rich harmony of Indian culture within the framework of national unity. It provides to all religious denominations freedom of religion. The future and stability of India, the integration of various groups - linguistic, religious and caste depends upon the flow of secular values among masses and classes.

Need of the Study:

In India national integration has become necessary for national survival. The hurdles on the way of national integration are regionalism, religious sacredness, linguistic pressures and communalism. If one believes in the values of secularism and practices these in behaviour than all discrimination and separations vanishes from social behaviour of man. The question of future India is directly related with the future of young generation. What values the future generation is going to adopt and practice may be the basic concern of this paper. In our country educational facilities differ from urban to rural areas and even among different sections of urbanites and ruralites. Here attention has been made whether children of the same grade differ in their secular attitude with reference to their school background, parents education, sex and rural urban background.

Methodology:

Sample: The Sample consists 103 urban and 74 rural students studying in classes IV & V, 103 students from Mother's International School, has been choosen and 74 from NDMC school at Katwaria village. Random sampling method has been used to select the students.

Tool: Tool used for collecting the data was secularity scale by Uday Pareek. The validity and reliability of the scale is .79 and .87 respectively. The tool consists items on 4 areas..

Hypotheses:

- i) There is no significant difference on secular attitude of upperprimary grade rural and urban children.
- ii) There is no significant difference between girls and boys of rural and urban background.
- iii) There is no significant difference among children of varying parental education level.

Analysis:

In order to reveal the difference between different groups of students according to sex, locality and economic status, 't' test of significance between two means have been applied. The formula used to calculate 't' value is

$$t = \frac{D}{*D}$$

where, D = difference between two sample means; and
*D = standard error of difference between means.

TABLE - 1

Secular Attitudes Score - Rural Urban Comparison

Group	N	M	*	*D	D	t	Significant level
Urban	103	45.68	3.52	.544	8.07	14.83	.01
Rural	74	37.63	3.61				

It can be seen that there is significant difference between rural and urban students in secular attitude. The

difference is significant beyond .01 level of significance.

TABLE 2.A

Secular Attitude of Girls and Boys (Mother's School)

Group	N	M	*	*D	D	t	Signifi- cant level
Girls	34	46.35	4.05	.79	.99	1.25	N.S. at .05
Boys	69	45.36	3.17				

TABLE 2-B

Secular Attitude of Girls and Boys (Kathwaria Village School)

Group	N	M	*	*D	D	t	Signifi- cant lev- el
Girls	38	38.86	4.02	.77	2.50	3.21	.01
Boys	36	36.36	2.54				

From Table 2-A and 2-B, it is evident that in public school (Mother's School) there is no significant difference between boys and girls on secular attitude. But in rural school (Kathwaria Village) the differences between boys and girls is significant at .01 level of significance. The mean score is higher in favour of girls in both the schools.

TABLE 3-A

Parents' Education and Secular Attitude of Children
(Mother's School)

Group	N	M	*	*D	D	t	Signifi- cant Level
Below inter	31	44.35	2.71	.65	1.91	2.93	.01
Above inter	72	46.26	3.86				

TABLE 3-B

Parents' Education and Secular Attitude(Kathwaria Village)

Group	N	M	*	*D	D	t	Significant Level
Parents B.S. or above	37	38.89	3.59				
Parents H.S. or above	37	38.4	3.52	.82	1.51	1.84	N.S. at .05

Table 3-A and 3-B reveal that there is significant difference in childrens' secular attitude with regard to parent's educational level. The high educational level of parents produce higher secular score. But there is no significant difference among students with different parental education in Katwaria Village School. Although score are

higher in case of those whose parents have higher educational level.

Conclusion and Suggestions:

Rural and urban students differ significantly in their secular attitude. Boys are lower in secular attitude score than girls. Parents educational level have direct impact upon secular attitude of children.

In order to inculcate values pertinent to secular ideas, school must have proper facilities and trained personnels. Attitudes are linked with poverty and Socio-economic status of people. Poverty or low economic status have adverse effect on secularity. To remove poverty is not an easy task. There are many other factors which put hinderances on the way to secularism. School can provide best ways to inculcate values among students not only through text-book contents but such depends upon the frequent mixing and rejoicing of different, groups of students from different cultures and far places. Extra curricular activities like N.S.S., N.C.C. are playing marvellous roles in this. Excursions and dramatics can be organized frequently during vacations. The problem is not much with urban and public school students as there are minimum facilities best tried to be provided. But the problem remains as such in rural areas. These excursions, visits, exhibition-trips and camps must be organised more promptly for rural students to bring them in touch with public school students and facilities existing there upon. Schools with good background and sound financial position can initiate a process of communication with rural world of students.

82.1.

THE PROBLEM OF DOWRY
IN MODERN INDIA

* * * * *

Govind Chandra Rath
Deptt. of Sociology
Sagur University
S A G A R.

A B S T R A C T

The present paper deals with pointing out the evils of Dowry in our present day society. This social evil was mainly a problem of middle class societies earlier which is rapidly covering both horizontally and vertically to the lower and higher social classes now with acute repercussions. The researcher views that the reasons enforcing dowry in our society are besides the traditional concept of 'Dakshina', numerical, educational and economical inequalities. as well as more gap between the gage of marriageable girls and boys.

THE PROBLEM OF DOWRY IN
MODERN INDIA - - - - -

INTRODUCTION:

Dowry is an acute problem in 20th Century India. Generally, it is a problem more for the middle income groups than in the lowest and the highest income groups. It is not a problem for the high socio-economic classes because they are economically better and they can pay. On the other hand it is increasingly becoming a problem for the lower castes, because they try to copy the customs of the people for which they are ^{ec/}economically no match. And hence the dowry becomes a problem for them. So that, Jammu reveals affirmatively, ".....the shoe pinches more in the middle income groups, greater number from which seems to say 'No it is not a problem of high castes, it is more a problem for us'. Briefly, dowry is a middle class problem in India.

The concept of Dowry:

According to the definition of Dowry Prohibition Act, 1961, "dowry means any property of valuable security given or agreed to be" given either directly or indirectly, (a) by one party to a marriage to the other party to a marriage, or (b) by the parents of either party to the

marriage or by any other person, to either party to the marriage or to any other person, at or before or after the marriage as consideration for the marriage of the said parties". As well as the full-fledged attempt for the clear definition of dowry of the Websters Third New International Dictionary (1936-68) is worth mentioning here. According to this definition dowry refers to (a) the money goods or estate, that a woman brings to her husband in marriage, (b) a gift of property by a man to or for his bride. Looking at the meanings assigned to this term in 'a' above in the context of Indian society, one may have nothing to disagree with, but part 'b' of the meanings has been embodied in a separate word. Both the parts (a) and (b) signify to two forms of gifts given to the newly married couple-first by the girls side to the boy which is known as dowry and the second from the boys party to the girl which is called bride price.

Bride Price & Dowry:

The bride-price system is prevalent among Harijans and other backward communities and among tribals. In the primitive society, the bride-price system refers to the socio-economic phenomenon. Because of the economic division of labour between the sexes, young girls are most useful to

their parents, helping in the production of food as well as domestic tasks. The loss of such services demands some compensation, which may take the form of bride-price. As well as the departure of a girl from her parent's family to the in-law's family is revealed a social or economical spiritual loss. This loss is recovered by the bride-price.

Due to the female infanticide among the tribal communities in India, the scarcity of women becomes a worthmentioning consequence. In the wake of the imposition of prohibition on infanticide practice by the British administration the proportion of the females to males has been showing an improvement for the last one century for which data are available. Simultaneously, with rapid expansion of money economy, education, new occupations and urbanisation, bride price is being gradually replaced by dowry even among them. Therefore, in recent years, the dowry system in India has spread both horizontally and vertically. Horizontally in the sense that it has spread to such regions and communities which, until recently, did not have it and which, in fact, had the bride price system, vertically in the sense that there has been a sharp increase in the amount of dowry demanded and taken. And it is ensured that the dowry is prevalent in the north of the vindhyas, and it will be spread to all parts of India towards the end of 2000 A.D.

Dowry among the Non-Hindu Communities:

Dowry in one form or another is practised, not only by Hindus, but also by Muslims and Christians in India. Although Muslim bridegroom promises a handsome 'Meher' or money as a part of marriage contract, known as 'Jode_Ke_Paise' or the cost of the bridal outfit, it runs into quite a few thousand rupees. It is also prevalent among Orthodox Christians of Kerala and Catholics of Mangalore and Goa, in that all expenses of Both the parties to the marriage are born by the bride's people. The Christians of Mangalore, still follow their pre-conversion custom of 'Kanyadan' and gift-giving that puts a heavy burden on the bride's family.

Dowry Growth:

(Traditional Reason)

Several factors may be identified as responsible for the fostering of dowry as an accepted system in the Indian society. Early reference to it can be found in the "Dharmashastra" describing it as Varadakshina or Shashtra describing it as Kanyadan. And according to Hindu religion no sacrifice is completed without appropriate Dakshina in the form of money and present. So as the Indian people are more traditional-value-oriented, they do not come back to give money and gold as dowry in the marriage.

Dowry Growth:
(Modern Reasons)

The basic reason for the problem of dowry in Modern century is inequality (1) numerical inequality (2) educational inequality and (3) economic inequality. If the number of males were equal to the number of females, and if ~~all~~ ^{all} males and all females were equal, educationally and economically, then there would not have been the problem of dowry certainly not as an acute one as we are having today in our society.

(1) Numerical Inequality:

If the number of females is equal to the number of males in each age group there should be no shortage of potential brides or grooms. However, there is always a gap between the age of husband and wife. Females marry at younger ages than males. With a wide gap between the age of husband and wife in a growing population country the effective number of marriageable females exceeds the effective number of marriageable males. It is this numerical inequality between marriageable males and females that contributes to the problem of dowry. Thus, when marriageable boys are in short supply parents of marriageable girls should offer dowry and even ~~compete~~ ^{compete} with one another to give larger dowry.

(2) Educational Inequality:

The educational inequality is one of the reasons for the growth of dowry in India. For a variety of reasons, a greater proportion of males than females, in India are educated. Although literacy is not the same thing as education, the difference in the proportion of literates among males and females has been increasing steadily. For an instance, in 1901, the male literacy was 9.8 percent and female literacy was 0.6, resulting in a difference of 9.2 percent. But in 1981, the proportion of literates was 46.7 % among males and 24.9% among females, resulting in a difference of 21.8% . This inequality reveals that there are not only more marriageable males than females with education, but that the former have more number of years of education than the latter. In such a situation, dowry is demanded or offered as a compensation to make the educated males marry the less educated or illiterate females. It is axiomatic that the greater the difference between the educated brides and grooms, the larger are the dowries demanded and given. By and by, this practice of demanding and giving dowry has become a social custom, and even the parents of males without education demand dowry and those of females with education offer it.

(3) Economic Inequality:

It is common knowledge that there exists economic inequality among marriageable males and among marriageable females. Education being equal, males demand a larger dowry in term of cash and/or kind. Likewise, males with an education that is likely to enable them to earn more money demand a larger dowry. The Central Government Class I Officers fall under this category. Similarly, education being equal, parents of gainfully-employed females are unlikely to offer larger dowry. Even the parents of educated males do not demand a large dowry from educated and gainfully employed females because they know that the earnings of their prospective daughter-in-laws will more than compensate for a larger dowry. Thus, economic inequality also contributes to the existing dowry problem in modern India.

Dowry Deaths:

The number of dowry deaths is ever on the increase. "Women dies of burn injuries", "Husband kills wife for the lust of scooter, T.V. and Fridge", "Avaricious in-laws burn young bride for not bringing sufficient dowry" - such headlines appear frequently in our newspapers. In 1981, the capital witnessed 394 cases of bride burning mostly suspected

to be dowry-related. Several such death reports came from U.P., Punjab, Haryana and Bihar. The basic question is why are "dowry deaths" increasing? What is the most prominent change that we find in our society? The most prominent change is emancipation and self-sufficiency of woman. Woman, today, is ready to enjoy all the legal and social concessions of 'weaker sex' but is not prepared to be acknowledged as 'weaker sex'. She wants to taste in experience and practice that she is in no way lesser than man.

Dowry Prohibition Act:

The earliest Legislation against dowry in this subcontinent, was passed in the pre-independence days by the Government of Sind, now in Pakistan. The bill was piloted in 1946 by Dr. Hemchandra Wadhani, a Minister of Sir Gulam Hussain Hidayatullah Cabinet, and he was given full support by the Muslim dominated Government, particularly the Amil Community among the Sindhis. As marriage and divorce come under the concurrent list under the constitution, the Central Legislation was enacted in 1961 by the efforts of Late Pt. Jawahar Lal Nehru and followed by the State Governments of Bihar, Orissa, West Bengal, Punjab, Haryana and Himachal Pradesh. The Karnatak Anti-Dowry Bill was passed in 1976 and all other state laws were suitably amended in

order to make, giving, taking and abetting dowry a cognisable offence. The Karnataka bill is the latest which extends the definition of dowry to include any financial help given by any person to a young man for his education or business with the intention of giving his daughter or any other relation in marriage to him. The social feature of this bill is that it provides for the imposition of tax on 'Luxury Marriages'. A marriage costing more than Rs. 5,000/- and upto Rs. 50,000/- will be taxed at the rate of 10% and a marriage costing more than Rs. 50,000/- will be taxed at the rate of 60%. The efforts of legislative actions are appropriate in this situation.

Conclusions:

Dowry is more familiar in the Southern parts of India than the Northern. Generally, it is a problem for the middle class people. Simultaneously, it destroys the prospective future of the Indian women. Dowry prohibition Act, 1961 contribute largely to remove this social evil. But there are some other wellknown factors without which this evil may not be wipe out from the face of the society. They are - self awareness among the women, reduction of the population growth, expansion of education, equally distribution of job opportunities among male and female reduction of the age inequality among the marriageable girls

22.11

and boys and above all the litigation of the traditional related attitude of the people. Excluding it, the efforts of the voluntary organisations are the most important to solve this problem.

*** **

R E F E R E N C E S

1. Aitekar, A.S. Position of Hindu Woman in India, 1956, Motilal Banarasi Das - P.31.
2. Fuchs, Stephen. The Gond and Bhunia of Eastern Mandla - New Literature Publishing Company, 12, Bake House Lane, Fort, Bombay p. 272.
3. Goody Jak & Tambiah Bride^{wealth} and Dowry - Cambridge S..J: University Press, 1973.
4. Gangrade, K.D. "Evils of Dowry" in the "Social Change" - Journal of the Council for Social Development Vol. 9, No.3, September, 1979.
5. Jammu, The Problem of Dowry in Punjab - Parakash Singh: Department of Sociology and Social Anthropology, Punjab University, Patiala, 1976.
6. Naik, T.B. The Bhils, A Study - Bharatiya Adimjat, Sevak Sangha, Kingsway, Delhi-9, p. 131.
7. Piddington, Ralpha An Introduction to social Anthropology Oliver and Boyd, Edinburgh: Tweeddale Court, London, 39A Welback Street, p. 139-40.
8. Panday R.B. "Hindu Sanskar" quoted in the report of the Committee on the Status of Women in India".
9. Sud, Arun Kumar "In defence of menfolk" - Hindustan Times, September 30, 1981 p. 1
10. Sharma, R.D. "The Dowry Menace" - Hindustan Times July 29, 1981, p.-9

22.13
R E P O R T S

11. Report of the Suicide Enquiry Committee, Gujarat, 1960-64.
12. Survey of Suicide in Bombay State, 1957-58.
13. Report of the Suicide Enquiry Committee of Saurashtra, 1952 .. 55.
14. Report of the Committee on the Status of Women in India, Government of India, Department of Social Welfare, 1974.

23.1.

The Youth and Mass Media

S.S. Vinayak and
A.D. Tewari
Department of Teacher Education
N.C.E.R.T.
NEW DELHI

Abstract

In this paper opinion of students of Delhi has been sought with respect to the usability, Ownership and choice of the material/ programme in three widely used mass media news-paper, radio and television. Data have been collected from 200 students studying in senior secondary and under-graduate classes. Results show that almost centpercent students use these three mass media(98.5 percent newspaper, andradio, and 95 percent T.V), out of which the proportion of regular user is:84 percent newspaper 89.5 percent/students subscribe newspaper, 91.5 percent have their own radio set and only 44.9 percent have their own T.V. set. College students significantly differ than that of the school students with respect to the mode of using T.V.

radio and
7.5 percent
television.
it is learnt
that 86 per-
cent.

Introduction

Mass media are defined as those instruments of communication which convey identical message to the large number of persons who are often physically separated. The identical one way messages may be printed, as in newspapers, books, pamphlets, comics and magazines. They may be on films as in film strips and motion pictures. The mass media also include radio, television and recording.

Various sorts of mass media have wide ranged effect both in the cognitive and non cognitive behaviours of human beings. Scientific inventions and technological advancements have contributed a lot in the multimedia communication. It has become a status symbol in our society, having a variety of communication objects. Keeping in view the vitality of mass media in present day society, in this paper, a short survey has been conducted on the three widely used mass media. These are newspaper, radio and television.

History:

In the history of Indian press, the first newspaper on modern lines appeared in Calcutta on the 27th January, 1780. It was the "Bengal Gazettee" published in English by an Englishman, J.A. Hickey. Since then much progress has been recorded by the press facing odds and evens. A recent survey shows that the total number of newspapers in India during 1979 was 17168.

Akashvani (Broadcasting) was pioneered in India by the efforts of amateurs (Madras Presidency Club in 1924)

23.3.

followed by private enterprises. Government took it later and did every possible effort to make it available to each and every person in the country. According to a recent estimate nearly 400 million potential listeners are to All India Radio.

Doordarshan(Television) has completed its 25th anniversary of its inception very recently. The first T.V. transmitter was installed in 1959. There were 18 in 1980 and estimate of 180 transmitters is expected by 1985. Doordarshan started its services using the auditorium attached to the Delhi Station of AIR which was converted into the television studio and daily one hour service commenced on August 15, 1965. It was started as a modest affair in India on September 15, 1980. Doordarshan was formally separated from All India Radio on April 1, 1976.

Mass media have much importance as medium of information and education particularly in a vast and developing country like ours. Not only quantitative expansion but qualitative improvement can be assured due to the use of mass media for educational purposes. No any other institution can be more economic, effective and beneficial than the mass media, so widely used in the length and width of the country for universalization of compulsory education amongst all.

Mass media are helping not only in vitalising formal education through various ways but certain concepts like correspondence education, distance education, ETV, open school, open university etc, are with their origin in the use of mass media in the universalisation of education.

OBJECTIVES

The major objectives of this study were:

1. To study the using habit of mass media of Delhi Students,
2. To study the ownership proportion of newspaper, radi. and T.V. of Delhi students.

METHODOLOGY

For the purpose of this study a sample of 200 school and college students were taken from randomly selected four senior secondary schools and four colleges of Delhi University. They were asked to response in a semistructured open ended questionnaire seeking information regarding their using habit, ownership and choice of materials/programs of news paper, radio and T.V. Responses thus received were categorised in limited categories and analysed as follows:

ANALYSIS AND INTERPRETATION

In Table 1, proportions of students using newspaper, radio and T.V. have been given.

Table 1

<u>Using habit</u>	<u>News paper</u>			<u>Radio</u>			<u>Television</u>		
	School	college	total	School	Coll	Total	Sch	Coll	Total
No use	0	3	3	1	2	3	1	9	10
rarely	5	1	6	6	9	15	13	3	16
occasionally	14	9	23	28	35	63	35	39	74
regularly	81	87	168	65	54	119	51	46	97

* Significant at 05 level

It is seen from Table 1 that 98.5 percent students use newspaper and radio while 95 percent use T.V. The proportion of regular user of these three mass media are 84 percent, 59.5 percent and 49.5 percent respectively. Proportion of school students significantly differ than that of the college students only in case of those who do not use T.V.

In Table 2., the proportion of school and college students on the basis of the availability of mass media to them have been given.

Table 2

Availability of Mass Media to Students

availability	<u>Newspaper</u>		Total	<u>Radio</u>		<u>Television</u>		
	School	College		School	College	Total	School	College
Owner set	86	86	172	93	38	131	13	70
Friends/Neighbours	6	4	10	3	3	6	35	7
School/college	7	4	11	2	1	3	51	0
Market/any other	1	3	4	1	6	7	0	8
Not available	0	3	3	1	2	3	1	9

* Significant at 05 level

** Significant at 01 level

It can be seen from Table 2. that highest proportion of school proportion of students in case of the availability

23.6.

of mass media, are of those who subscribe newspaper at have radio and TV set. A good proportion of school students view TV programs in school T.V. set, while none of the college students does so. Significant difference have been observed among the proportions of school and college students with respect to availability of TV set.

Conclusion

It can be concluded from the above survey that mass media are widely used among students. Educational Programs on radio, TV can improve both quantity and quality wise literacy status. Though the proportion of students using TV is not high enough, this may be because of its recency and cost. Since about 25 percent school students view programs in the school TV only which can be used for educational purposes more intensively and widely.

References

1. NSSE, Mass Media and Education 53rd Year book, Chicago, University of Chicago, 1954.
2. Baruah, U.L. This is All India Radio Delhi, Ministry of Information and Broadcasting, Govt. of India, 1983.
3. Rau, M.C. The Romance of Newspaper, New Delhi, NCERT, 1971
4. Takashima Y. et al. Children and Television 'Japan', Radio & Television Culture Research Institute, 1971
5. The Encyclopedie of Educational Media Communications and Technology, New York, The Mc Millian Press Ltd., 1978

.....

A STUDY OF THE RELATIONSHIP BETWEEN SELF CONCEPT
AND SCHOLASTIC ACHIEVEMENT OF VII GRADE STUDENTS

S.R.P. Chowdhary
J.F.F., DESSH, NCERT,
New Delhi.

ABSTRACT

A Sample of 300 VII grade students were administered Self Concept Scale by Singh and Singh (1968) and two groups of students with good self concept and poor self concept were identified by calculating P₂₀ and P₈₀. Results show that scholastic achievement of students with good self concept was significantly better than those students with poor self concept. Self concept shows significant high positive correlation with scholastic achievement of VII grade students.

Introduction

From the time when his life begins, each child is very much a social creature. As young infant strong ties are being established between him and other human beings. Interwoven with the child's earliest experiences and expectation, and intimately connected with his survival from day-to-day, are associations with others. These accumulate during the ensuing weeks and months as he grows more and more alert to what is happening about him. The child's experience with the humanity of others helps to shape his own humanity.

In the normal course of events a child becomes more actively social as he grows older, builds relationships with other persons and acquires values and aspirations that others share. But from the beginning he has a streak of individuality of his own and as time passes he comes increasingly aware of himself as a separate being. This awareness of self is known as self concept.

Young child is depended on other for his welfare, he has little confidence in himself. As he matures, his behaviour is making by a growing attitudes of self-assertion. He strive to gain self-confixence is the management of his own affairs and to shift from dependence on others to dependence on self.

Sigmund Freud explained the development of personality according to the self-concept mechanism that produces the

libido or basic instinctual energy. He includes in his explanation of the self concept three system.

"The Id, the ego and the Super ego" which represent three stages of the developing self-concept.

Self-concept -

An adequate concept of the self is basic to an interpretation of personality. In any discussion of the self term such as the following are commonly used to denote the various aspect of self hood "self consciousness", "self realization", "self preservations", "self confidence", "self assertion", "self dependence" and "self esteem".

So "The individuals awareness of an identification with his organism, connative power and mode of conduct and performance, accompanied by specific attitudes toward them is called self concept".

Scholastic Achievement -

To know the scholastic achievement of the students researcher took the school result of class VI in the subjects like English, Hindi, Mathematics, Science, Social Science, Sanskrit/Urdu, art, craft, PT test. Students marks in the main subjects obtained in the previous examination were considered as representative of their scholastic achievement.

There are many problem faced by the adolescents, if we look at the scholastic achievement of these students we get disappointed. Why it is so? This question arises in the mind of the researcher^{ers}. Therefore, the researcher wanted to know who

are these students who can not adjust themselves in life and so poor achievement in studies. Many Psychologists hold the view that adolescent problems may be in the areas of educations. What is the percentration of adolescent about themselves? Do their self-concepts show any influence on their scholastic achievement? In the bid of find out a suitable answer of these questions relationship of students self concept with that of Scholastic Achievement Occured to the mind of the present researcher.

Thus the problem related for the study is "A Study of the relationship between self concept and Scholastic Achivement to VII grade students."

Related Literature -

Zuckerman, S.L. (1954) studied the difference in self concept of boys and girls. His interesting finding is that the self concept of boy is higher than that of girl when compared with each other.

Mussen, P.H. (1958). studied the self concept of adults and found that the self concept is a developing construct which through stable over a period is yet amenable to change.

Mukherjee B.N. (1966) studied self concept and achievement. In a study they found that there are a logical relationship between achievement and self concept.

Mehta P.H. (1968) studied on the relationship between self-concept and achievement and found the relationship to

be linear.

Vasantha R. K. (1973) studied the relationship between self concept and achievement. Some of the findings are starting, as for example "that the lowest intelligence group among the forward community students has higher mean self concept and achievement score than the highest intelligence group among backward community students.

Objective of the Study -

The objective of the present study are as below:-

- 1) To study of self concept of VIIth grade students of pre-adolescence stage.
- 2) To study the scholastic achievements of pre-adolescent students.
3. To study the relationship between self concept (good and poor) and Scholastic Achievement.

Hypothesis - Hypothesis of the present study are as below:-

1. Self-concept and Scholastic Achievement are positively correlated.
2. There is significant difference between good self concept student and poor self concept students on Scholastic Achievement.

Delimitation -

1. Only male students were included in the sample.
2. Only VIIth grade students were studied.
3. The students were selected from seven schools of Gorakhpur City.

4. Average age of the students was 12 years.
5. Only one self concept scale constructed by Dr. Singh ment for young children was used.
6. School marks have been used as Scholastic Achievements of students.

The Procedure of the Study

The Method of Study -

The method employed in the present study were survey method and comparative method. The survey method was used to study the self concept and scholastic achievement of student, while the comparative method was used for making the comparison of scholastic achievements of two groups know as the children of good self concept and poor self concepts.

Tools and Techniques -

Data were collected mainly with the help of one tool, due to study the self concept of the subjects with the help "Self Concept Scale for Children" Singh & Singh (1968).

Sample -

The Universe of the present investigation consisted of the VIIth grade regular students studying in the various schools in Gorakhpur City. The study was conducted on 300 students only. Purposive sampling technique was used for drawing the present sample.

Procedure of the data collection -

The self concept scale for children was administered to different school students. Scoring of the test was done as given in the manual of the test.

Result and interpretation -

Self concept of VIIth class children - The score obtained by 300 students were tabulated and their means, SD and percentile P_{20} and P_{80} were calculated as given below:

$$N = 300$$

$$\bar{X} = 84.40$$

$$SD = 9.55$$

$$P_{20} = 76.3$$

$$P_{80} = 92.95$$

The above data show: that the mean score of self concept of the VIIth grade students was found 84.40 with SD 9.55. The two percentile value P_{20} and P_{80} calculated for the purpose to locate a cut point for indentifying students with poor and good self concepts. The two values P_{20} and P_{80} were found 76.3 and 92.95 respectively.

Scholastic Achievement of VIIth Class Students -

For Scholastic Achievement grand total out of 1000 marks in all subject secured by the Students were taken. Their marks were on the basis of their half yearly examination. The marks obtained by 300 students were tabulated and \bar{X} , SD were calculated as given below:

$$\bar{X} = 462.67 \text{ and } SD = 121.00$$

The above data show that the mean score of scholastic achievement of the VII grade students was 462.67 with SD 122.0. Thus it can be calculated that the scholastic achievement of VIIth grade students is about 46 percent.

Scholastic Achievement of the good self concept student and poor self concept students of VIIth grade

There were 60 students who have good self concept and 60 students have poor self concept. Below are given the N, \bar{X} , SD and corresponding t value in order to compared Scholastic Achievement of these students who have good and poor self concept.

Good Self Concept	Poor Self Concept
N = 60	N = 60
\bar{X} = 624.5	\bar{X} = 377.83
SD = 128.40	SD = 176.00

and t value = 8.6

Level of Significance = Significant at .01 level.

Thus, it can be said that the difference between the two group is highly significant. Students with Good Self Conc. are better in Scholastic Achievement than those of the student with Poor Self Concept.

Relationship between Self Concept and Scholastic Achievement

The correlation value "r" between the score of the self concept and the Scholastic Achievement was found to be .76. The number of students was 300 and expected value at the number is .15 at .01 level. This value of correlation is larger

than the expected value. This indicates significant positive correlation between the two variable. It means that good self concept is / associated with good Scholastic Achievement and poor self concept is related to poor Scholastic Achievement.

Conclusion -

1. Self concept is positively correlated with Scholastic Achievement.
2. Good self concept group is better than that of poor self concept group in Scholastic Achievement.

REFERENCES

A. Books

1. Goode & Hatt., Methods in Social Research. International Student edition McGraw Hills Book Company, IMC Tokyo Kogarusha Company, Ltd., 1962.
2. Jersild, Arthur T. Child Psychology. Printice-hall Inc. 1960.
3. Mussen, P.H. & Jones, H.C. Child Development (1957)
4. Singh & Singh: Manual and directions for self concept scale for children. Ayra Psychological Research Cell, Tewari Kathi, Ballenganj, Agra-282004.

B. Journals and Dissertations

1. Mannism: Social interaction and the self concept. Journal of Psychological Research IX 3.
2. Vashnta Ram Kumar: Self Concept and achievement (Ph.D. Thesis) 1973. Published by Radha Publication, J-1, Jawahar Niwas Trivendum.